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**In Light**  
**monodrama for soprano, flute, guitar, percussion and electronics**

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**In Light**  
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**by**  
**Michael Thomas Zapruder**

**Dissertation**

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## **Abstract**

### **In Light**

#### **monodrama for soprano, flute, guitar, percussion and electronics**

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The University of Texas at Austin, 2019

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*In Light* is a one-act monodrama in five scenes, scored for soprano, flute, guitar, percussion and electronics. The libretto was written by the composer, and is an adaptation of *Peitho and the Night* by Hannah Kenah. The work was premiered by Jaimie Lowe, Kenzie Slottow, Thomas Echols, Jordan Walsh, and Michael Zapruder at the B. Iden Payne Theater on April 18, 2019. Lighting design is integral to the full realization of *In Light*, and as such, the piece aims to present an attractive challenge to light artists for whom opportunities to share the foreground in theatrical works may be somewhat rare.

*In Light* tells the story of Hilde, a young woman who spontaneously develops a quantum-accurate sense of light. Through this story, *In Light* aims to create a space in which the audience might experience light – natural scientific light – anew, as if for the first time. By creating a sonic, visual and narrative space in which quantum effects collide with the ordinary world, *In Light* explores stark differences between the discontinuous, indeterminate reality of light at the quantum level and the linear, narrative sense of self that humans experience. This paper traces the creation of *In Light* from

initial concepts, through the creation of the story, libretto, and music; and it contains a musical analysis of the work.

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## Chapter 1: Beginnings

### 1.1 INTRODUCTION

*In Light* is a monodrama for soprano, flute, guitar, percussion and electronics. It is a dramatic work that highlights the possibility of transformative change in human life, grounded in the belief that change on a massive scale is of critical importance at this perilous moment in human history. This paper describes in detail *In Light's* musical and dramatic contents, and it illuminates the most important inspirations, questions, influences, and goals related to the piece. The first two chapters explore the genesis of the piece, the creation of the narrative and libretto, the pre-compositional musical ideas, and the initial lighting design ideas. Chapter Three summarizes the stages of the compositional process. Chapter Four provides a musical analysis, focusing on *In Light's* musical elements, formal structures, vocal writing, leitmotifs, electronics, and other musical details. Chapter Five briefly details conclusions drawn from the experience of creating this work.

*In Light* has its genesis in darkness, specifically in the aftermath of the 2016 United States presidential election. While I am no stranger to dark interpretations of human behavior, the 2016 election broke something for me. It succeeded in accomplishing what considerable life experience in widely varied exploits had not: it turned my healthy skepticism about people into actual misanthropy. Merriam-Webster's online dictionary defines misanthropy as "a hatred or mistrust of humankind," and I take pains to say that my misanthropy is of the latter, not the former kind. I do not hate humanity, but in view of the events of the last several years, my trust in it been significantly shaken.

Into this crisis of belief came hope from an unexpected direction, in the form of three science fiction novels by Chinese author Cixin Liu. These books - *The Three Body Problem*, *The Dark Forest*, and *Death's End* - present a narrative in which physics and the physical universe itself (as described by relativity and quantum mechanics) emerge as sources of power and possibility that dwarf considerations of human identity and intention. As a lifelong humanities person, with a fairly basic scientific education and with a decidedly human-first, art-first perspective, finding myself pinning my hopes for the future on the mechanical possibilities of the universe was a significant shift. Yet as I learned more and really dug into the strange realities of contemporary physics (to the extent that a layperson like myself can understand them), I found myself seeing how distrust of humankind was not at all incompatible with believing that we might be smart enough to save ourselves from our social and political problems. Physics, like music, operates independently of language, and as such, bypasses many of the pitfalls and impasses that language-based consensus building requires. I am bearish on humanity's potential to build global, communication-based consensus - even on a danger as clear and present as climate change - but I remain at least somewhat hopeful that we might be able to solve problems mechanically. *In Light*, as a story in which a young woman spontaneously develops a quantum-accurate sense of light, instrumentalizes Liu's particular vision of the physical universe in order to explore the disconnection between that physical reality and our intuitive, human sense of ongoing consciousness.

In spite of the above, however, *In Light* is ultimately a humanistic work. That is, by showing audiences the difference between our continuous, narrative sense of human identity and the discontinuous, counter-intuitive physical universe in which we actually live, *In Light* aims to plant seeds of change. The first step in that change is well expressed by this T. S. Eliot quote from *Four Quartets*: "Wait without thought, for you are not

ready for thought” (Eliot, 23). In the face of quantum mechanics, none of us is ready for thought, and none of us is ready for speech, either. This, for me, is the beginning of hope: humility, awe, and silence. It was from this inchoate miasma of thoughts and feelings that *In Light*’s first idea emerged. That idea was simply to contemplate the implications of a human being having a confrontation with light.

## **1.2 INFLUENCE OF LIGHT**

### ***1.2.1 Aesthetic Influences***

*In Light* is not a parable. The light in *In Light* is always *actual* light, it is never symbolic or metaphoric light. The light in the show is never a symbol for anything. It is not a carrier for even a single word. It is not sentient; it is not alive (in any carbon-based sense of the word). In this opera, light was to be nothing more nor less than what it actually is: a measurable phenomenon, silent, asymptotically fast, ineffable, common, abundant, matterless, and mysterious (to us). The goal was to allow the audience to see light as if for the first time, and to do so without the sense that the light was being subordinated to some concept or morality or anything else at all.

From the earliest moments of thinking about this piece, I wanted *In Light* to be a light show, and to have the show flow as a visually impactful set of tableaux, as a series of paintings and sculptures of light. I knew that in order for *In Light* to expose the potential in the humbling actuality of physical reality, the theater would have to be filled with actual light that the audience could feel.

### ***1.2.2 Scientific Influences***

In the early days of working on this piece, I read several books about light, including two books in particular that informed this work: Bruce Watson’s *Light: A*

*Radiant History from Creation to the Quantum Age* and Anil Anathaswamy's *Through Two Doors at Once: The Elegant Experiment That Captures the Enigma of Our Quantum Reality*. Bruce Watson's description of Einstein's famous thought experiment, in which Einstein realized that if the speed of light is constant then time must be variable, was influential, as it made the special relationship between light and time more comprehensible to me, and in so doing increased my awareness of the gap between humanism and the physical universe. Anathaswamy's book was even more influential, as it explores in detail a long-running experiment, first performed in 1801 by Thomas Young, that even more powerfully reveals the gap between reality and our sense of identity. The results of this experiment – called the double slit experiment - are famously effective in demonstrating the counter-intuitive and often paradoxical behavior of light (and other particles), including wave-particle duality, indeterminacy, entanglement, and nonlocality. *In Light* developed out of extensive contemplation of these phenomena and their implications. I highly recommend Anathaswamy's book for its ability to facilitate such contemplation.

The reason this kind of scientific background matters and needs to be included here is that what happens to Hilde in *In Light* is *logically possible*. This is because if something actually exists, then it is theoretically possible for an organism, given enough time and need, to develop a way to perceive it. Perhaps somewhere in the universe such a creature exists right now. This is why, as I wrote above, *In Light* is not a parable. In this opera, Hilde becomes entangled with light and develops an ability to somehow sense it in its quantum nature. In order to understand the intended meaning of the piece, it is necessary that one know something about what that means.

### *1.2.3 Light and Change*

I wrote above that *In Light* is a humanistic work. The connection I wanted to make in this piece, and the thing that makes it a humanistic work, is to show that just as our physical reality bears little resemblance to what we believe is possible, so too might our social reality. I wanted to make people feel humbled and inspired, full of reverent wonder and amazement, and to imply that such feelings might be a good starting point for thinking about a world with a long, bright future.

Cixin Liu's books convinced me that the actual possibilities for how we relate to the physical universe around us are almost limitless. This fact - not an aspirational, rose-tinted-glasses hope, but a logical conclusion based on actual observable physical evidence - is at the center not only of *In Light*, but of the kind of attitude toward change that I think is warranted in our time. We may still have the chance to choose the change we experience, if we act quickly enough. More likely, I fear, we may have change forced on us by the direct or secondary effects of climate change; but either way, the degree of change that I believe we will all experience in the next few decades will be extreme. We cannot continue to live as we are now, and *In Light* was intended to be a mysterious story that, using wonder generated by encounters with light, and using a musical narrative, could leave audiences with an expansive outlook that might be of use as we begin the process of remaking the world in sustainable, more reality-based ways.

As a final word about change based on scientific fact, when I started working on *In Light*, Greta Thunberg was just beginning her School Strike for Climate. Over the past year, as she has emerged as a public figure and a leader, I have been struck, and very much encouraged, by the fact that Thunberg's relationship to the world in which we live, and her relationship to change and possibility in particular, is in fact very much like Hilde's relationship to her world in *In Light*. I consider the existence of Greta Thunberg

to be a great light in this dark moment, but also, in a much smaller way, I consider her to be a confirmation of the intuitions behind *In Light*. When Thunberg sails across the Atlantic Ocean instead of flying, she is behaving in a totally rational, sensible way; in terms of what is sane and true, it does not matter that she is the only one doing so (though it is tragic). What is critical to understand in the context of *In Light* is that Hilde's experience is rational and sensible in the same way. The fact that others cannot accept Hilde's emerging consciousness of light has everything to do with the limits they place on possibility, their inability to imagine change, and perhaps most importantly, the incorrect idea that things as they currently exist are as they must be, and cannot change.

### **1.3 MUSICAL INFLUENCES AND GUIDING ELEMENTS**

In the course of composing *In Light*, I listened to and studied many works. Among these, a few pieces were especially influential. First among equals is Alban Berg's *Wozzeck* (1925), for its astonishing combination of complexity and artistry. From *Wozzeck*, Arnold Schoenberg's *Erwartung* (1909), and Richard Strauss's *Salome* (1905) I took inspiration for *In Light*'s use of leitmotifs. From Du Yun's *Angel's Bone* (2015), I took inspiration to attempt a fearless and contemporary approach to vocal writing, particularly in spoken, shouted and non-melodic styles. Secondly, *Angel's Bone*'s chaotic textures inspired certain sections of *In Light*. Benjamin Britten's *Curlew River* (1954) has been a guiding light for me for a long time for its restraint, its patience, especially in terms of instrumentation and creating separate sound-worlds within a limited ensemble. From *Curlew River* I also took the idea of having framing narration at the beginning and end of the piece, and I studied the narrative structure of the piece as I was developing the story of *In Light*. Thomas Adès's *The Exterminating Angel* (2016) provided a vision of the uncanny that haunted the composition of *In Light* and for which I

will probably always be reaching. Finally, *Remain in Light*, a 1980 album by the art-rock band Talking Heads, provided source material for the flute cadenzas in Scene Three, and served as a model for some of *In Light*'s structural elements.

#### **1.4 OTHER GOALS**

I was committed to collaboration as a central value in developing *In Light*. I wanted *In Light* to benefit from other people, other minds, the capabilities that others, dedicated to creative areas in which I have little or no experience, can bring. I hoped to give portions of the piece away to my collaborators, both as a satisfying personal and artistic experience, and also as a strategy for the future life of the piece. I intended, for example, for the lighting designer to own this piece as a showcase of her art and as a rare opportunity to have the lighting in a show be significantly foregrounded. Similarly, I envisioned the primary singer embracing this work as a possible signature work, and as a vehicle for showing her abilities and practicing her art.

I chose a very small ensemble, and I was committed from the beginning to try to make this piece one which any flautist, guitarist or percussionist would be eager to play, and which my performers would be eager to continue to perform. Notwithstanding the various unavoidable issues and limitations of the initial production, this goal was successfully reached. Everyone wants to do the piece again. Additionally, the musicians were immensely helpful (and understanding) in refining and improving the instrumental and vocal parts. This was such a satisfying dimension of this experience, and may stand out as the best part of this production for me.

Another initial goal I had was to explore diverse approaches to vocal music and styles. This particular goal had much to do with my overall areas of musical activity, which combine composition of all kinds with songwriting and its particular style of

singing. I was interested, and remain so, in the artistic implications, challenges, and opportunities that mixed vocal approaches might create.

Finally, from a professional perspective, I wanted this piece to serve as a cornerstone piece, as a calling card that I could use to pivot from my academic work to professional work. For this reason, I chose an operatic monodrama, as contemporary opera has emerged as my primary area of professional interest; and I intentionally chose the smallest possible ensemble I thought I might be able to use successfully, so as to increase the chances for future productions of the piece.



## Chapter 2: Development

*In Light* was developed from May 2018 to December 2018. During this period, I initiated collaborations with librettist Hannah Kenah and lighting designer Austin Shirley, and I began the process of workshopping musical ideas and sharing inspirations with flautist Kenzie Slottow, percussionist Jordan Walsh, guitarist Thomas Echols, and soprano Jaimie Lowe. I also began to collect some musical elements that I thought might be useful.

### 2.1 CREATING THE LIBRETTO

The libretto for *In Light* is adapted from a libretto by playwright Hannah Kenah which is entitled *Peitho and the Night*. The actual unfolding of events in the creation of these two librettos was somewhat convoluted, since *Peitho and the Night* was actually the product of an initial attempt Ms. Kenah and I made to collaborate on a libretto for *In Light*. Over the course of six weeks beginning in May of 2018, we worked together to develop a narrative and language for *In Light*. The process resulted in a fine libretto, and yet, as sometimes happens with collaboration, that text ended up addressing different themes and developing a different central character than my initial inspiration had sought. From August to October 2018, I developed a narrative and wrote a new libretto that more closely mapped to my interests and to the core of the piece.

In my libretto for *In Light* I chose to retain the central narrative device, created by Ms. Kenah, that *Peitho and the Night* uses, in which a person loses her sight bit by bit, by categories of objects such as people, animals, the stars and planets, and so on. Here and there, *In Light* also contains a few phrases and images that closely resemble parts of *Peitho and the Night*. This resulted in some disentangling later in the fall, and in the end,

Ms. Kenah and I agreed amicably that *In Light* should include an attribution that says: “Adapted with permission from *Peitho and the Night* by Hannah Kenah.”

As I began to write the libretto for *In Light*, I searched for a language-sound as a way into Hilde’s world. Somewhat to my surprise, I found it in a verse form in which quatrains comprised of lines of free and significantly varying lengths followed an *a b a b, c d c d...* rhyme scheme. Eventually, nearly all of this early verse writing would be revised, and yet, in parts of the final libretto, this sense of elaborate syntax survived even without the rhymes. These moments are neither ubiquitous nor rare - the phrasing in the libretto simply inherited a certain complexity that grew out of the original verse writing.

Over the course of *In Light*, Hilde changes, finally becoming a kind of elevated, ascended master. For this ascended Hilde, I intentionally wanted the kind of awkward, halting, somewhat formal language described above. I wanted it to feel like it was hard for Hilde to down-sample her experience into human language. As such, some sections, such as the end of Scene One and in the later parts of Scene Five, retain the use of this type of verse in the final libretto.

To illustrate the difference between Hilde as an ordinary person experiencing extraordinary things, and Hilde, as she is at the end of the opera, as a transformed human being, here are libretto excerpts from Scenes Two and Five.

From Scene Two:

I was looking at the birds. I felt lightheaded for a moment. When I looked again, the birds, their bodies were gone. The birds, gone. I told my mother. she didn't speak at all. I could not see her. I am so alone.

From Scene Five (with rhyming quatrains of irregular lengths):

I had no designs on a life illuminated,  
but sometimes, fate or chance assigns a soul to be brought low or to be elevated.  
Which of these two outcomes my story represents, you people may decide.  
I well know the portions of good and bad that I would place on either side.

Having found a mode of writing that forged a path into Hilde's world, I began work on the plot. Using a book called *The Architecture of Drama: Plot, Character, Theme, Genre, and Style* by David Letwin, Joe Stockdale, and Robin Stockdale, I analyzed my scenario and created a tighter narrative, complete with the seven basic elements of plot as described in the book: leading character, inciting incident, objectives, obstacles, crisis, climax and resolution. I developed a narrative structure that met all these basic requirements, and then created a set of storyboards, one for each major sub-section of the narrative. With the storyboards as my guide, I wrote the final libretto.<sup>1</sup>

## **2.2 IN LIGHT SCENE SUMMARY**

*In Light* begins with a flashback. Four days earlier, Hilde, a young woman around the age of thirteen, froze in the middle of speaking a word. When the freeze ended, she found she could no longer see human bodies. Her attempts to explain this to her parents were met with disbelief, and she was placed in her room, in the care of some nurses (called Caretakers in the libretto).

Scene Two jumps to four days later. Hilde is still locked in her room, and over the past four days, she has lost, one day at a time, the ability to see human bodies, animal bodies, the sun, and then everything else except light itself, which she can see as a kind of milky gray, formless space, in which light beams and shines come and go. Hilde is shaken and stressed, and in an effort to convince herself that she is sane, she reviews the events of the past four days. Having done this, Hilde feels better, and she then turns her attention toward her new experience of light, becoming in the second half of the scene inspired, confident and elated. She is fighting to trust her own experience, and to believe

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<sup>1</sup> Appendix B.1, p. 203, contains a scan of the storyboard sketches.

that what she is experiencing is real, even though no one believes her. The scene ends with a caretaker entering her room, startling her in the midst of her inspiration.

In Scene Three, Hilde goes to sleep as her caretakers gossip about her in the next room. They describe her as being insane, while in her sleep, Hilde communes with light, singing vocalise and gradually becoming more and more confident. Hilde then wakes up and experiences a kind of insight in which she learns that she will have the chance to decide between continuing to follow this new experience of light, or returning to her ordinary life. Hilde also learns that if she decides to continue her strange transformation, she will lose her sight entirely; and that in order to stay connected to light in this new way, she must remain in her room for another day.

In Scene Four, Hilde falls back asleep, and the theater is filled with light and sound. There is no dramatic action in this scene, nor is there any singing or text. This scene is designed to create a space and time in which the audience can have its own experience with light.

Scene Five begins the following morning, with the caretakers re-entering Hilde's space to try to convince her to come out and talk to her family. Hilde is tempted and wavers, but she realizes that she cannot turn away from this new experience of light, no matter how terrifying and uncertain it is. When the caretakers attempt to physically remove her, a physical struggle ensues, and in the course of this struggle, Hilde freezes again in the middle of a word. The caretakers, seeing one of her transformations for themselves, finally understand that Hilde's changes are real. With this freeze, Hilde has taken the final step in her transformation. She delights in her new experience, then exits, singing from offstage in the final scene: "I was remade by events which others could not accept."

## 2.3 NARRATIVE DEVELOPMENT

In addition to Letwin, Stockdale, and Stockdale's book mentioned above, another important source for my thinking about narrative was Dr. Byron Almén's *A Theory of Musical Narrative*. In this book, Almén describes four archetypal narrative types: the romantic, the tragic, the ironic, and the comic. Almén's theory is complex, with deep roots in semiotics and in the work of other theorists. Without summarizing the text, I will point out that the critical differences between Almén's various types of musical narrative have to do with temporal hierarchical relationships between identifiable musical entities. Almén's work attempts to deal directly with musical meaning as it unfolds in sound alone, which also means that his narrative types are not linguistic. Since operas contain language, I must state that the narrative of *In Light* is loosely based on - or perhaps "inspired by" - Almén's categories. That is, Almén's theories of musical narrative were very much in my mind as I identified within *In Light* a group of four thematic complexes, each of which represented a plot thread and therefore could support a set of musical and sonic elements. These complexes guided me throughout the compositional process; they represent the spine of the work.

The names I assigned to these four dimensions of *In Light's* narrative are intentionally imprecise and vague. I find that simpler words with less precise meanings seem better able to carry the kinds of complex ambiguities inherent in the development of creative work. These thematic complexes are my own terms, mapped onto Almén's theory as musical and narrative complexes which interact and eventually establish a relative hierarchy over the course of the piece. They are the *not yet*, the *already*, the *ever*, and the *new*.

The *not yet*, the *already*, and the *new* refer to dimensions of human activity and attitudes that affect each other in various ways; while the *ever* indicates the universe,

eternity, the realm of light. Although the realm of light and quantum mechanics can and does exert all kinds of influence on the activities of human beings, it is important to note that it does so passively. Similarly, in *In Light*, the *ever* is not an equal participant in the action. It is untouched by the things it affects.

Narratively, *In Light* is a work in which the *not yet*, antagonized by the *already* and aided by timely appearances of the *ever*, eventually overturns the *already* and becomes the *new*. In Almén's formulation, *In Light* would therefore be characterized as a comic narrative, because it "involves a transvaluation in which transgressive elements successfully challenge and overturn an initial hierarchy" (Almén, 188). I wish to stress again that Almén's theory refers strictly to musical elements and musical relative hierarchy, and so in a stricter sense, *In Light's* narrative does not qualify as anything at all in his theory. I am transposing his useful way of thinking about musical elements onto musical, textual and narrative elements, and I refer to this here because of the centrality of these formulations as I composed *In Light*.

Throughout *In Light*, the four thematic complexes listed above are associated with various instruments, techniques, motives, harmonies, and the like. These relationships are elucidated in detail in Chapter Four.<sup>2</sup>

## 2.4 MUSICAL PRE-COMPOSITION

As I was creating the libretto and narrative, I was also developing initial sketches and ideas for harmonies, pitch collections, instrumentation, and musical qualities and character. The work I did in these areas was quite broad. Much of it did not appear in the final work in its exact form, and yet the ideas upon which the particular musical sketches were based often did. For example, the very first musical work I did on *In Light* was a

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<sup>2</sup> Appendix B.2, p. 204, contains a scan of one of the narrative development pages from my notebooks.

page of melodic sketches, the first of which is a scalar idea in which several pitch collections together imply, with their final pitches, a C major scale without its final leading tone.

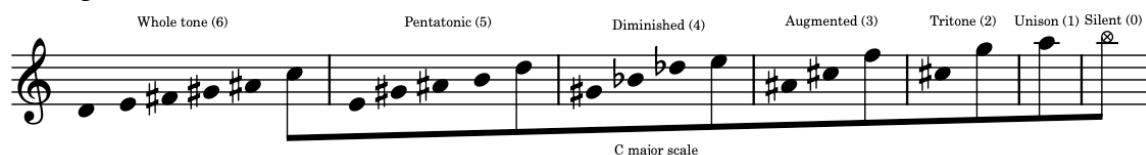


Figure 1: Initial melodic sketch of pitch collections for *In Light*

While I did not use this particular idea in the piece, three implied ideas from this sketch can be found in *In Light*. The first is the use of specific scales and pitch collections to indicate thematic identities. For example, throughout *In Light*, whole tone collections indicate dilation and expansiveness, and by extension the *not yet*; pentatonic collections indicate eternity and the *ever*; and tritones indicate conflict and the *already*. The second embedded idea is the notion that behind groups of pitch collections is a larger, simpler unity. To me, this points to the tantalizing prospect that the physical universe, fundamentally, is simple and elegant, and as such, is related to the behavior of light. Finally, this initial sketch contains the idea of subtractive processes. Figure 1 shows the unfolding of a series of pitch collections, each of which has one fewer pitch than the preceding one, and the final note of which is meant to be implied and never actually played. Light, after all, is silent.

In addition to a running journal of dated notes, with which I navigated the creative process, my pre-compositional work included several other areas. I made some percussion studies, in which I determined the percussion instruments to be included in the piece. I considered the possibilities for the ensemble and explored possible subsets of the instruments, possible ways to create contrast, and ways to reserve sounds and instruments. I investigated the electronics design and possibilities for creating sounds that

might reflect the dynamics of light such as refraction, reflection, prismatic light, and wave-particle duality. I did some preliminary harmony studies. Finally, I did significant narrative analysis of the piece as the story was developing.

Having done all the above, I eventually created a set of worksheet sketch pages, one for each significant sub-section of the piece. On each of these pages, I described the dramatic character, musical qualities, and instrumentation/sounds that the sub-section would have. Below that, I made space for “sketches/ideas/materials,” where I could develop musical elements and keep notes on the vision for this section of the opera. I referred to these notes frequently as I composed the opera.<sup>3</sup>

## **2.5 LIGHTING DESIGN**

From the beginning, my intention was to create a piece that wasn’t just about light, but that was in some way *made of light*. I intended to collaborate closely with a lighting designer or light artist to create something that, on a purely visual level, could accomplish my goals.

My initial inspiration for the light design was to create a physical, sculptural, non-virtual light entity. In retrospect, this was inspired and correct. For this initial production, however, as with the initial work with the librettist/playwright, the collaborative process, and to a much greater degree the practical exigencies of producing *In Light* as part of a large festival, presented obstacles that prevented us from realizing that initial vision.

I worked with lighting designer Austin Shirley and we enjoyed a good, substantive collaboration. Among other things, Austin excels at making drawings, and throughout the process, he made exciting images of possible production choices. Austin and I knew that we could make the piece out of the lighting instruments in the theater,

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<sup>3</sup> Appendix B.3, pp. 205-215, contains scans of the scene worksheets.



and we came up with the term “light beam architecture” to describe our vision. We envisioned the space flooded with light, with, as Hilde sings at one point in the opera, “beams and shines, coming and going.”

Eventually, we settled on the idea of using projections in combination with the light beam architecture. This made sense because it would allow us to make video content before we were in the space. In January of 2019, we did a green screen session with our musicians during which we had them act out several of the key stage moments. Our idea was to use multiple versions of these actions, overlapping with the actions they would be performing on stage. When, in the weeks before our production, we made the difficult choice to do the piece on book (the reasons for which are described in Chapter 3.3 below), all the blocking and physical interactions that we had filmed and which we were planning to project were cut from the show. This made all the green screen footage obsolete.

## **2.6 STAGING IDEAS**

From the earliest sketches of the project, I had in mind a particular staging built around a *lemniscate* (the figure eight shape often used to designate infinity), angled on the floor such that the stage-right side of the shape would be closer to the audience than the stage-left. In this concept, the stage-right loop was to be the Caretakers’ area, and the stage-left loop was to be Hilde’s room. I envisioned the musicians far upstage on the stage-right side (behind the Caretakers’ space), with other playing areas to be designated later in the process. In discussions with Austin Shirley, we determined that we could make a similar shape out of lighting instruments if we used squared, rather than rounded, corners. This initial staging plan (which was not utilized for this first production) is depicted below in Figure 2.

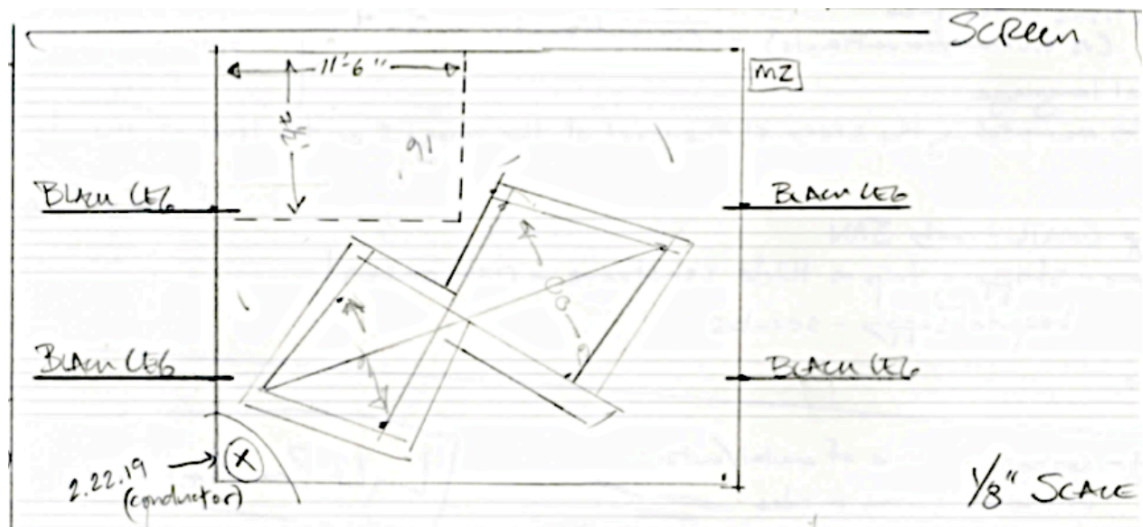


Figure 2: Sketch of original staging idea (drawing by Austin Shirley)

## Chapter 3: The Compositional Process

### 3.1 ACOUSTIC ELEMENTS

*In Light* is scored for flute, doubling on piccolo and alto, acoustic and electric guitar (although as will be explained below, the electric guitar was cut from the final score), and percussion, including vibraphone and an assortment of unpitched instruments (Figure 3). My decision to use these instruments was primarily influenced, as mentioned above, by a desire to use the smallest possible ensemble. Secondly, I had an intuitive feeling that this ensemble has something light-like about it.

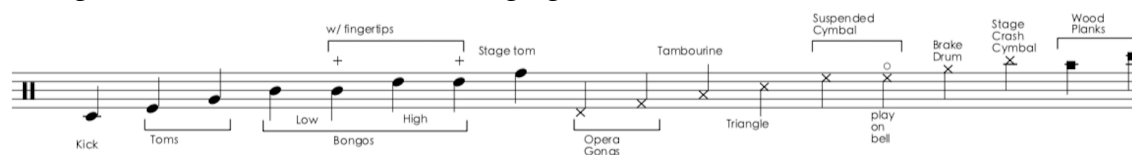


Figure 3: *In Light* unpitched percussion instruments

Having finished the libretto and completed my detailed pre-compositional plans, I finally began to compose *In Light* on December 31, 2018. I composed an initial sketch which was completed on February 1, 2019. I then completed and fully orchestrated that sketch to create the first full draft, which I sent to my ensemble and conductor on March 3, 2019. Over the following week I made some revisions and refinements before sending a revised draft version on March 10, 2019. Finally, in the ensuing week, based on further reflection, first rehearsals and feedback from players and from Dr. Sharlat, I made significant cuts and changes to the piece, especially in Scenes One, Two and Five. This was done primarily to eliminate unnecessary repetition in the libretto. Finally, later in the rehearsal process, I made significant changes to the first part of Scene Three (these changes are detailed below in Section 4.2.1).

I wrote the initial sketch in three stages. The first stage was a prosody/vocal draft: just a vocal line with pitches and rhythms specified, with very minimal notes about

harmony or accompaniment. I based the melodic character of the vocal line on the scalar and pitch collection associations I wanted to make between the vocal line and the narrative, so that, for example, at moments of expansiveness when the narrative refers to Hilde's excitement about what is happening to her, the melodic material tends toward dilation in the form of whole tone segments, or, in moments of peacefulness, pentatonic segments. This process of developing the vocal line was largely generated by my decisions about what characteristics the melody ought to have in a particular section based on those kinds of deeper structural considerations. Choices of register, as well as the presence or absence of melismas, were driven by my intuition, sense of flow, and considerations for levels of intensity as the drama progressed. I reserved climactic vocal moments (high notes and melismas) for the key points in the opera, and I considered such things as destination points as I worked my way through the text.

For the second stage of the initial sketch, I worked through the prosody/vocal draft and blocked in harmonies. As I did this, I continued to think in terms of segments, by which I mean linear or melodic expressions of pitch collections as expressed by the melody, but in the harmonies, I did not restrict myself to the melodic pitch sets of the vocal line. Instead, I used the basic materials I had generated in pre-composition, including certain core harmonies and voicings of chords, and I connected those to the narrative and thematic progression of the piece. During this stage, I also catalogued and classified *In Light's* harmonic materials according to their pitch-class set Forte numbers.<sup>4</sup> I was looking for deeper family resemblances among the harmonies that I might not have noticed but that might be useful. As it turned out, many of the five and six pitch harmonies shared significant subsets of pitch-classes. I will elucidate this in greater detail

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<sup>4</sup> Appendix B.4, pp. 216-217, contains scans of samples of these harmonic analyses from my notebooks.

in the musical analysis below. Once I had finished blocking in all the harmonies and segments with the vocal line, I transferred everything to the computer while simultaneously fleshing out other musical details such as rhythms, meters, and tempi. This comprised the initial sketch.

In the next step, I focused on orchestration, rhythmic details, and what I called signals. During this stage, I listened to Berg's *Wozzeck*, Schoenberg's *Erwartung*, Strauss's *Salome*, Debussy's *Pelléas et Mélisande* (1902) and Saariaho's *L'Amour de Loin* (2000). I was listening for the way these pieces indicate emotional or plot changes musically, as opposed to by the use of text or vocal cues; and I was looking for ways to create a layer of those kinds of signals in my piece.<sup>5</sup> To do this, I scanned *In Light*'s score and listened to the mockup, and identified over 130 moments at which such a musical gesture would be welcome. I then listed the musical quality I thought that moment should have, made some notes about the narrative and thematic character of that point in the drama, and left a column open for identifying the signal that I wanted to place there.<sup>6</sup> Having done this, I then catalogued all of the musical elements I had used in the piece and created a list of the ones that might be used as leitmotifs. This included motives, textures, pitch-class sets, harmonies, and themes. This resulted in a list of over 40 leitmotifs I could use. I named them, categorized them by type, made notes about the musical elements they contained, and identified the family to which each of them belonged. These families included the thematic complexes of the *not yet*, *new*, *already* and *ever*, plus motives that belonged to Hilde.<sup>7</sup> Finally, I added these leitmotifs and signals to the piece, adjusting the existing instrumentation and orchestration as needed.

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<sup>5</sup> Appendix B.5, pp. 218, contains a scan of this work on *Wozzeck* and *Erwartung*.

<sup>6</sup> See Appendix B.6.1, pp. 219-221.

<sup>7</sup> See Appendix B.6.2, p. 222.

During the composition of this first full draft, I communicated closely with the soprano, Jaimie Lowe. With her help, we identified sections of her range that work best for different types of vocalizing, and we made edits to the vocal line to make it more singable. For example, at one of the important climactic moments in Scene Five (mm. 139-142), I had written a vocal line that came naturally to me (I composed this section by recording myself playing the harmonic succession at the piano and singing the text freely and then transcribing that), but which was not idiomatic for Jaimie. Figure 4 contains the original vocal line I composed (note that I was singing it an octave lower):



Figure 4: Original vocal line draft

And here is Jaimie’s response: “Having all those As in a row is a tessitura issue, it sits too high for too long and the highly chromatic movement in there after having just sung a bunch of As also increases the difficulty.” After some back and forth, the final line looked like this:



Figure 5: Edited vocal line, Scene Five, mm. 139-142

In the period following our first piano/vocal rehearsals, Jaimie and I got together again and played and sang through the entire vocal part, making a number of other changes, mostly having to do with register, but also sometimes dealing with passages that we felt would work better if they were simplified. This was a critically important step in

the composition of the piece, and it resulted in a part that Jaimie was able to sing with confidence and power.

Later, during the rehearsal process and the weeks before the performances, I had similar but much more comprehensive communications with my guitarist, Thomas Echols. This was due to a number of factors, some of which I address in Section 3.3 below. The most serious issues came from the fact that, because one of my core elements (the Radiant harmony) was built on a widely-spaced, low, major triad, I originally wrote this draft calling for a fairly extreme *scordatura* of the guitar, in which its two lowest strings would be tuned down a perfect fourth to B and D. As a guitarist, I was able to play through the piece and confirm that this is workable. In fact, it made many of the harmonies quite easy to play and idiomatic on the guitar. After completing this draft, however, I decided to re-voice the guitar part for standard tuning. I was concerned about tuning issues and the possibility that *scordatura* might negatively impact the chance for future performances. The process of re-voicing all those harmonies on the guitar created enormous challenges, and most of the edits that Thomas and I worked on had to do with these chord voicings. I am indebted to him for his patience and his masterful knowledge of the instrument. Due to his contributions, *In Light* has a difficult but idiomatic guitar part, which, as I mentioned in the introduction, was one of my goals.

### **3.2 ELECTRONICS**

Most of the work in composing the electronics for *In Light* was done in March and April of 2019, after the final performance version of the score was delivered to the ensemble and conductor. Although my initial thoughts and goals for the electronics in the piece had been primarily focused on light dynamics, by this time, especially given the changes to the guitar tuning, the electronics emerged as a necessary extension of the

ensemble into the lower registers. Secondly, but also importantly, the electronics offered the best chance I had to create significant timbral diversity for the guitar and flute in particular.

The electronics for *In Light* are controlled with a custom software program, or patch, that I programmed in a visual programming language called Max/MSP.<sup>8</sup> For the purposes of this paper, it will suffice to understand that the patch contributes two major categories of sounds to *In Light*: fixed media sound files which were generally used to extend the range of the ensemble or to express certain harmonies and voicings that the ensemble could not create; and processed sounds such as spectral freeze, delays, filters, and various methods of distortion, created in real time using microphones on the instruments and vocalists and distributed to the four loudspeakers. All of *In Light's* electronic sounds were spatialized in quadrophonic sound using Ircam's (Institut de Recherche et Coordination Acoustique/Musique) SPAT software, which is a flexible and powerful real-time program for spatialization of sounds.

Although the creation of the *In Light* Max/MSP patch was done almost entirely in the period of time described above, planning for the electronics was underway from the beginning and continued throughout the acoustic composition process. Ideas for electronic sounds are evident throughout my scene planning worksheets, and in the computer drafts of the piece I made throughout February and March, 2019, there are text notes in the score describing electronic textures and sounds to be added later. This is important to understand, since the timeline might suggest that the electronics were composed as a kind of afterthought and simply as a means to make up for limitations in

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<sup>8</sup> Details of the electronics schematic can be found in Appendix A on p. 200.



the pitch or timbral range of the ensemble. As mentioned above, electronic textures and sounds were among the very first notes I made about *In Light*.

The process of composing the electronic sounds proceeded in the two main dimensions described above. On the one hand, for each of the places where I had made a note calling for a fixed media cue, I created a fixed media file. For the live processing side, I created a patch architecture that could process sounds, either from the fixed media files, or more often, from live microphone inputs, and pass that audio to and from sound processing modules before sending it through SPAT, which handled the panning of the four channels of audio before it was sent out to the mixer and then to the speakers. Dr. Nina C. Young provided invaluable help in understanding the best way to design the patch's overall architecture; and Dr. Russell Pinkston's instruction in Max/MSP programming, as well as a number of his lesson plans and assignments, provided starting points and raw material for me as I built the patch.

In the final score of *In Light*, electronics cues are indicated in a separate staff and part, to be performed live with the ensemble and included in the conductor's purview. At each cue in the score, indicated by a large circled number in the electronics part, the electronics performer triggers the indicated cue by pressing the space bar. As such, the part can be played by anyone, provided they can either read music or that the conductor can ensure that they trigger the cues at the proper time.

### **3.3 PERFORMANCE AND PRODUCTION-RELATED ADJUSTMENTS**

*In Light* was performed as part of the 2019 Cohen New Works Festival, a biennial festival produced by the University of Texas Department of Theater and Dance at venues throughout the campus of the University of Texas at Austin. Focusing enthusiastically on the idea of the new, the festival's mission statement reads: "The Cohen New Works

Festival exists to support, promote, and champion original, student-generated work across a variety of artistic mediums.” As a large, student-run festival with multiple runs of more than thirty shows over a five-day span, the New Works Festival is both an exuberant, vibrant expression of creativity, and an exercise in doing more with less.

A number of production-related changes affected *In Light* as it was performed on April 18<sup>th</sup> and 19<sup>th</sup> of 2019. Some of these changes were a by-product of participation in the fast-moving context of a student-run festival; but more were the result of issues arising from the fact that we had to mount a performance of the piece in a short time and with limited rehearsal time.

Before we began to create the production of the piece in the theater we were assigned, we made several changes to instrumentation, to the piece itself, and to the staging and direction plan of the performance.

### ***3.3.1 Electric Guitar***

In terms of instrumentation, the first major change came during the first ensemble rehearsal. I had composed the piece for both acoustic and electric guitar, with the understanding that Thomas Echols and I would work together on the timbral details of the electric guitar sound once the score was done and the general musical timing was in place. The idea was that the electric guitar timbres would develop in a collaborative process running parallel to the ensemble rehearsals. As an experienced electric guitarist, I was well aware of a serious problem with attempting to use electric guitar as an instrument in the same way one might use a flute or piano. This is because as a general term, “electric guitar” indicates an “instrument” with a virtually limitless set of possible sound-producing qualities. The variables involved in the constituent elements of the electric guitar, even without considering amplification or effects, produce a vast set of

possible sounds as the eventual timbre of the instrument. Different pickups, wood types and densities, body shapes, string thicknesses and materials, fret sizes, and even different pick thicknesses influence the sound of the electric guitar in noticeable ways. Add to that the even greater variety of types of amplifiers, with their infinite combinations of gain stages, circuitry, speaker sizes and tonal characteristics, plus the many thousands of possible pedals and effects, all chained together in different orders, and there is no meaningful single sound connected to the term “electric guitar.” Moreover, in contemporary classical music, many guitarists must compensate for the loudness of the instrument, especially when it is distorted, by using significant amounts of dynamic compression (compression being a processing technique in which the difference between the loudest and softest sounds in an audio signal is reduced so that loud sounds are quieter and quiet sounds are louder). Not only do I strongly dislike this sound, I find it distorts the sense of a unified ensemble, since one instrument is in a kind of space in which loud sounds are not loud and quiet sounds are not quiet, while the other instruments are subject to the ordinary laws of acoustics. I knew all of this well as we began the process of rehearsing, and I was confident that Thomas and I could work with his equipment to produce the timbres I had in mind. However, two things led me to decide that, given the timeline of rehearsals before the production, it would be better to use the acoustic guitar for everything and to try to create other timbral effects using the Max patch.

The first was that the basic timbre profile of Thomas’s electric guitar and amplifier was rich and somewhat dark (in the terminology of frequencies, this refers to the fact that it had more low and low-midrange frequencies than bright, high frequencies). When combined with the vibraphone, this immediately evoked jazz. I love jazz music, but in a piece like this, a sonic association to jazz brought in expectations of

certain sounds, playing styles and an attitude and spirit even, that was too specific and familiar. It was as if the ambiguity of the piece that I wanted to create collapsed into a familiar genre even before any musical ideas had time to develop. I knew instantly that it would take considerable work on the guitar's timbre to disentangle it from the vibraphone, and I did not feel we would have time for this while also getting the musicians comfortable with the music itself.

The second dimension was that reading notated chamber music for the electric guitar, with its different playing techniques (using a pick, for example), string tension, string spacing, and of course the significantly different timbre(s) that come out of the amplifier, presents a strange kind of challenge for guitarists. That is, there is some translation required, especially when something close to sight reading is necessary, as it was in our first rehearsals. This translation seems to be on the order of difficulty of playing figured bass or doing live transposition, and as such it is no problem, with enough time to prepare, for a guitarist of Thomas's caliber; and yet it is a bit strange to play complex chamber music on electric guitar. As with the timbral issue, this hitch in the development process, in the context of the very few rehearsals we had scheduled, made using the electric guitar feel too risky. Switching to the acoustic guitar eliminated these issues.

### ***3.3.2 Vocal Line Doublings***

Another issue that emerged as soon as we started rehearsing had to do with instrumental support for the vocal line. In our early rehearsals it became clear that the piece would work better if the vocal line were doubled more often. A great part of this comes from the ensemble that I chose, in which the only harmony instruments are the guitar, vibraphone and, if desired, the electronics. Both the guitar and vibraphone begin

to decay immediately after notes are sounded, so there is often very little sustaining harmonic sound for the singer to sing “into.” I made significant changes to the flute, guitar and percussion parts to ensure that the singer would always have an instrument doubling the vocal line itself, or giving an audible starting pitch reference. This reduced the clarity of some of the leitmotifs and harmonic aspects of the piece, but, as with most adjustments to make pieces more idiomatic, it probably had a salutary effect overall.

### ***3.3.3 Cuts to Scene Three***

Another major compositional adjustment we made to the piece before the performance was to cut the first half of Scene Three significantly. This is explored in greater detail in Section 4.2.1c of the musical analysis below.

### ***3.3.4 Performing On Book***

Finally, two weeks before the show, we decided to perform the piece on book, that is, with the singer and musicians reading their parts rather than acting them out. While this was definitely the correct decision, it had the effect of eliminating a major dimension of our storytelling power, especially in the context of a monodrama. With such limited storytelling resources, having the singer act out her experiences is critically important to the ultimate effectiveness of this piece. Another significant effect of eliminating the blocking in the show was that it made it impossible for us to use the green screen recordings we had created, and our basic projection plan for the piece (which had replaced the idea of a sculptural light entity). Without bodies on stage acting out the events, we felt that green screen versions of those actions would have been distracting. In retrospect, perhaps they would have been effective, but certainly from a musical point of

view, the choice to do the show on book was the best one. Future versions of the piece will incorporate staging and all other design elements.

## Chapter 4: Musical Analysis

This section contains a musical analysis of *In Light*, beginning with a summary of *In Light*'s musical terms that will be useful in the analysis, and then examining the opera's leitmotifs, formal structures, vocal writing, subtractive processes, gestures and timbres, harmonies and segments, electronics, and thematic complexes.

### 4.1 MUSICAL ELEMENTS AND DEFINITION OF TERMS

#### 4.1.1 Terms

Throughout the musical analysis to follow, I make reference to a few musical terms, some of which are standard and some of which are not. For clarity, those terms are defined here.

##### 4.1.1a Z-cell

“Z-cell” is a term coined by music theorist Elliot Antokoletz to describe a pitch collection in which perfect fourths and minor seconds alternate (from lowest pitch to highest).



Figure 6: A Z-cell harmony, Forte set 4-9 (0167)

##### 4.1.1b Forte Pitch-Class Set

Forte pitch-class sets are numbers assigned by composer and music theorist Allen Forte to categorize all the possible combinations of pitch-classes (pitches considered without regard to their register) in sets of 3, 4, 5, and 6 pitch classes. In his system, the first number represents the number of pitch-classes in the set, and the second represents the set's number in Forte's taxonomy.

#### 4.1.1c Segmentation

Finally, in parts of the analysis I refer to segmentation - a method of analysis in which nearby groups of pitches, either in simultaneous harmonies or in melodies that play out over time, are considered as belonging to a particular pitch-class set.

#### 4.1.2 Leitmotifs

One of my core desires in composing *In Light* was to create a work that drew a significant part of its forward momentum from a layer of leitmotifs. In composing *In Light* I used a number of characteristic motives and harmonies in this way. They are listed below, with brief descriptions.

##### 4.1.2a - Smallness Motive

The Smallness motive, associated with the *already*, is a four-note figure that spans the interval of a tritone.



Figure 7: Smallness motive, Forte set 4-12 (0246)

##### 4.1.2b - Hilde's Motive

Hilde's motive is comprised of falling perfect fourths separated by a major second, followed by a rising whole tone. It represents Hilde's openness and her strength and is associated with the *not yet* and with the *new*.



Figure 8: Hilde motive, Forte set 5-25 (02358)



#### 4.1.2c - Hope Motive

The Hope motive is comprised of a series of four trichords. The first is a set of stacked perfect fifths on B-natural, the second is a D-flat major triad with the third as the first pitch, the third is a partial G-flat major seventh chord harmony with the seventh as the first pitch, the fourth trichord is stacked perfect fifths on E-flat. This motive is associated with the *not yet* and with the *new*.



Figure 9: Hope motive, Forte sets by trichord: 3-9 (027), 3-11 (037), 3-4 (015), 3-9 (027)

#### 4.1.2d - Help/Family Motive

The Help/Family motive is based on stacked fourths but also outlines a diminished triad in the first three notes of the top voice, which then moves chromatically from its inner E-flat to E-natural, before falling a fourth again. It is associated with the *not yet*.



Figure 10: Help/Family motive, includes stacked fourths, Forte set 3-9 (027)

#### 4.1.2e - Abandonment Motive

The Abandonment motive is taken from Alban Berg's *Wozzeck*, from the barroom scene during which the barmaid sees the blood on Wozzeck's arm. Berg's melody here is beautifully uncanny, and I wanted to give Hilde's loneliness a touch of that feeling.



Figure 11: Alban Berg, *Wozzeck*, 3rd Scene, *A Low Tavern*



Figure 12: Abandonment motive (based on *Wozzeck* fragment), Forte set 6-z24 (013468)

#### 4.1.2f – I, oh I Motive

Hilde’s I, oh I motive is based on a fragment of a guitar solo from *The Great Curve*, a track from the Talking Heads’ album *Remain in Light*.

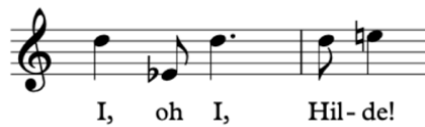


Figure 13: I, oh I motive

#### 4.1.2g - Threat Motive

The Threat motive uses voice exchange within a dissonant “Z-cell” harmony. It is associated with the *already*.



Figure 14: Threat motive, Forte set 4-9 (0167)

#### 4.1.2h - Ascended Motive

The Ascended motive begins with three rising perfect fifths followed by four descending perfect fourths. It is associated with the *ever*.



Figure 15: Ascended motive, Forte sets: rising 5ths 4-23 (0257), descending 4ths 5-35 (02479)

#### 4.1.1i - Radiant Harmony

The Radiant harmony consists of stacked perfect fifths on B-natural over a widely spaced C major chord. This sonority is one that Vincent Persichetti outlined in his book *Twentieth Century Harmony: Creative Aspects and Practice*. The fact that the lower triad of this sonority is the humble C major triad is no accident. Light is essential and has no need to try to be anything other than what it is. The upper sonority is a trichord of stacked fifths, which contributes a more plangent and abstract kind of balance that is somehow mathematical, or perhaps scientific. This sonority is associated with the *ever* and is named for its stable, open quality and the resemblance therein to radiant beams of light.



Figure 16: Radiant harmony, Forte sets (trichords): 3-11 (037), 3-9 (027)

#### 4.1.1j - Hue Sonorities

The Hue sonorities are a series of extended tertian chords, meaning that they pair major, minor and augmented triads with thirds or sixths from relatively-unrelated pitch collections. An ascending C major scale rises beneath the first eight chords, and the descending harmonies and bass scale are derived from inverting the first seven harmonies around C as the center pitch, in reverse order. These sonorities are associated with the *new*.





Figure 20: Mutation theme

#### 4.1.1m – Ascended Theme

The Ascended theme occurs in Scene One, as Hilde narrates the story from after the fact, and in the final measures of the opera. It is based on widely spaced trichords of various types and is associated with the *new*.

Figure 21: Ascended theme, Scene One, mm. 98-101

#### 4.1.3 Pitch collections and their thematic associations

Throughout *In Light*, I used pentatonic, octatonic, whole tone, major, Lydian and Z-cell pitch collections as segments in order to create associations of expansiveness, peacefulness, conflict and other dramatic moods. Generally, pentatonic and Lydian collections are associated with the *ever*, whole tone collections are associated with the *not*

yet, and octatonic and Z-cell collections are associated with the *already* or with moments of conflict and transition. Additionally, stacked fifths and fourths occur frequently and are associated with the *ever* and with the *new*.

## 4.2 FORMAL STRUCTURES

The formal structures within *In Light* are reflections of the libretto, and as such, they are based primarily on narrative structure and concerns. Generally, *In Light* contains *recitativo*, *arioso*, and *aria* sections, but often the lines between these sections are more a matter of degree than of kind. *In Light* does not contain any “numbers” or show-stopping *arias*, although the *arias* that the opera does contain are certainly meant to be climactic and impactful. This is an aesthetic stance. Essentially, I was seeking to provide a satisfying degree of drama and intensity, without crossing a line into excessive artifice. My choices with regard to the distribution of standard operatic sections were made with this balance in mind.

### 4.2.1 Scene Form Details

*In Light* is structured in one act containing five scenes.

Scene	One	Two	Three	Four	Five
Measures	1-124	1-426	1-164	1-151	1-329
Rehearsal Numbers	1-6	7-25	26-33	34-39	40-64

*Table 1: In Light large-scale formal plan*

#### 4.2.1a – Scene One Form

Section	A	B	C	D
Measures	1-30	31-52	53-74	75-119

Table 2: Scene One, large-scale formal plan

Scene One is introductory, a curtain-raising, designed as a series of glimpses of the elements of the show to come. It is based on the idea of a “dumbshow,” which is a theatrical term that refers to a play that is acted without words. Musically, each of the four sections in Scene One is based on just one or two musical ideas, all of which are static or frozen. This intentional lack of musical development creates a stylized, almost ritual quality, inspired by the character of the opening of Britten’s *Curlew River*.

#### 4.2.1b – Scene Two Form

Section	Prelude	Introduction	<i>Recitativo</i> (Four Days)	<i>Arioso</i> (mixed)	<i>Aria</i> (I, Oh I)
Measures	1-9	10-54	55-245	246-353	354-426

Table 3: Scene Two, large-scale formal plan

Scene Two is the longest scene in the opera. Dramatically, it traces a general arc from Hilde’s doubt to her confidence, and as such, mirrors the fundamental narrative arc of the opera as a whole. While most of its sections have a number of sub-sections, formally, Scene Two can be understood as having a simple form in which an introductory section is followed by three major sections which move from *recitativo* to *arioso* to *aria*.

Section	Introduction		A - Four Days ( <i>recit</i> )				Transition ( <i>arioso</i> )			B - ( <i>aria</i> )
Sub-section	a	b	a	b	c	d	a	b	c	a
Content	Prelude	Intro	Day One	Day Two	Day Three	Day Four	Present tense	Motoric section	Complete Mutation Theme	I, oh I
Measures	1-9	10-54	55-77 78-110	111-139 140-166	167-220	221-245	246-286	287-324	325-353	354-426

Table 4: Scene Two, detailed formal plan

#### 4.2.1c – Scene Three Form

Section	A	B
Measures	1-61	62-164

Table 5: Scene Three, large-scale formal plan

Scene Three has two main sections. In terms of operatic styles, Section A features spoken text from the instrumentalists and vocalise from Hilde, and as such, does not fit neatly into a category of *recitativo*, *arioso*, or *aria*. Section A is primarily rhythmic and, while it develops the conflict in the piece, is also largely non-narrative. Section B is an *arioso* section with flute cadenzas.

As mentioned above, the form of Section A of Scene Three was significantly edited for the performance (this edited version is included in the score here). These edits distorted the formal plan of the scene significantly, and thus a description of the full, unmodified version is necessary here. More details of this discussion are included below in the section on meter. A brief overview of the formal plan of the full version and of the reduced version is included here.

Scene Three Section A, as originally written, consisted of a series of fourteen rhythmic cycles, each of which contained 70 eighth notes (the eighth note pulse is shared by both time signatures). 70 eighth notes translates into seven measures of 5/4, and ten measures of 7/8, per cycle. As these cycles progress, the piccolo and Hilde (in 7/8) work



their way through a succession of transpositions of a motive; while the guitar (in 5/4) plays a series of Z-cell harmonies. These guitar successions consist of sixteen harmonies, with one harmony for each measure. Thus, as the guitar only makes it through seven harmonies for each cycle, each of the guitar's sixteen-harmony units lasts for sixteen measures of 5/4, which corresponds (in 5/4) to two rhythmic cycles (7 measures + 7 measures) plus two additional measures.

Cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Guitar Harmonies	1: F	2: F#		3: G		4: G#		5: A		6: A#		7: B		
Piccolo			G	A	G	G		F#	Bb		C	C#	D	D
Hilde						E			G		A	A#	B	B

*Table 6: Scene Three, Section A Form, original*

In the original version of this section, the guitar part moves up in register in a very regimented way, even as its cycles do not align with the larger rhythmic cycles. This created a subtle but effective sense of rising tension through the section. In the edited version, however, the elimination of cycles 1-7 caused the guitar to begin its part at the end of its fourth cycle, and then the excision of cycle 10 removed the corresponding part of that cycle from the guitar part, as well.

Cycle	8	9	11	12	13	14
Guitar Harmonies	4: G# (part)	5: A	5: A	6: A#		7: B
Piccolo	F#	Bb	C	C#	D	D
Hilde		G	A	A#	B	B

*Table 7: Scene Three, Section A Form, edited mm. 1-61*

While it is unlikely that any listener would hear and consciously notice these irregularities, it is by no means hard to believe that a listener might feel them. This arrangement of elements is too variable, too un-patterned, to function as it was intended.

#### 4.2.1d – Scene Four Form

Element	Start	End	Measures
Radiant harmony	0:00	1:40	1-62
Particles	0:50	1:10	31-42
Hue sonorities	1:30	2:30	57-91
Particles	1:50	4:00	66-151
Radiant harmony	2:45	3:20	85-129
Stacked fifths	3:25	4:00	131-147

*Table 8: Scene Four, large-scale formal plan*

Scene Four is a fixed media track with live accompaniment. It has no singing and was intended to be a light show or solo for the lighting design. As the fixed media track is all the audience hears for the first few minutes of this section, sonically, it is designed to reset the sound-world, and to therefore provide a context in which the re-entry of the acoustic instruments can sound fresh. I developed its form on a timeline, and then, only after the fixed media track was completed, did I transfer it to notation. This is why the formal plan above is described by time spans as well as measures, and why the measures overlap. This scene returns to a kind of ritual, static mode; it is the purest expression of the *ever* in the piece, and is meant to evoke wonder and contemplation in the audience.

### 4.2.1e – Scene Five Form

Section	Introduction	A	B					A <sup>1</sup>	Freeze	C	D
Measures	1-14	15-40	41-70	71-91	92-118	119-151	152-179	180-210	211-225	226-290	291-329
Description	Introduction	Caretakers and Hilde interact	"Bright, whispering traces"	Motivic, "Ordinary life again"	Transition	"Even if it means I lose it all"	Transition	Caretakers and Hilde struggle	Hilde freeze on Eb	Hilde in the <i>new</i>	Postlude
Vocal Style		<i>Recitativo</i>	<i>Aria</i>	<i>Arioso</i>	<i>Recitativo</i>	<i>Aria</i>	<i>Arioso</i>	<i>Recitativo</i>		<i>Arioso</i>	<i>Chant</i>

Table 9: Scene Five, large-scale formal plan

Scene Five has a through-composed form which moves, in Sections A, B and A<sup>1</sup>, through the climax of the piece, arriving at a frozen vocal note that repeats the opening gesture of the opera and thus completes a kind of circular form for the piece as a whole. This large A B A<sup>1</sup> form is followed by two coda-like sections. Section C is static and represents a superposition-inspired music of the *new*, and Section D reprises the first half of Section D from Scene One.

## 4.3 VOCAL WRITING

### 4.3.1 Soprano Vocal Modes and Approaches

Over the course of *In Light*, the soprano part traverses a wide variety of vocal approaches, some of which are typical of contemporary operatic writing, and some of which are less so. Typical modes of singing include *recitativo*, *arioso* and *aria*. In the *recitativo* sections, the vocal register tends to be lower, and repeated pitches are common.

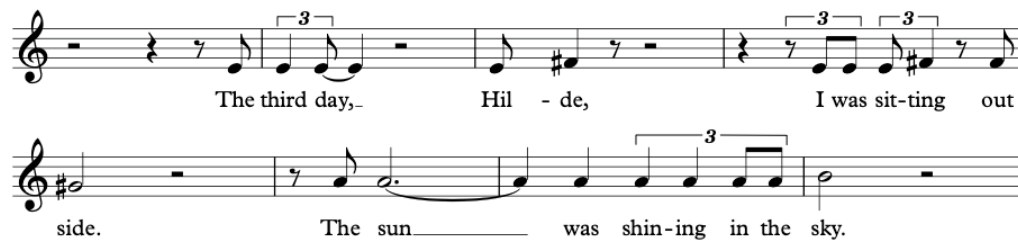


Figure 22: An example of recitativo writing in *In Light*, Scene Two, mm. 179-186

As Figure 22 shows, the *recitativo* style in *In Light* tends to move around, rather than remaining on a single pitch for long stretches. In this sense, it is somewhat closer to *arioso*, which is a style characterized by an informal melodic quality. Just as the libretto of *In Light* is not strictly organized by form, separated into sections that are clearly *recitativo* or *aria*, the soprano line spends most of its time in this hybrid mode of *arioso*. This is also a matter of taste, as I tend to like melodic writing, even in sections where the singer is delivering information, or in which action is occurring.

This brings up a standard topic in opera, which is the distinction between sections of the opera in which narrative time is passing, which correspond to *recitativo* and *arioso* sections, and sections in which time stops and the singer addresses some feeling or subject. This is *aria* time, which enacts a kind of suspension of reality and of time so that the singer can explore an emotion or subject. *In Light*, being a monodrama, has extra challenges in this regard, since there is only one singer to convey most of the action. Long stretches of dry *recitativo* make for tedious listening, whereas *arioso* can flexibly transition from the repeated pitches and simple rhythms of *recitativo* to something more colorful.

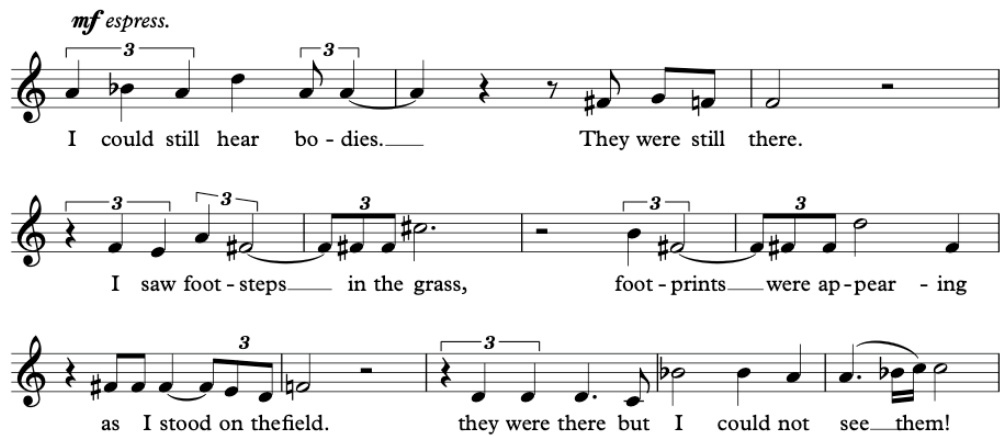


Figure 23: An example of arioso writing in *In Light*, Scene One, mm. 79-90

The *Aria* sections of *In Light* are somewhat brief, partly due to the narrative demands on the libretto as mentioned above, and partly as a matter of taste. The opera is attempting to engage with non-anthropomorphism, neutrality, and with the silent power of light. In this context, long, dramatic *arias* would not seem to fit. That said, the audience's emotional experience must take place through identification with Hilde and engagement with her story. Moreover, on an almost physical level, repetition and patterned music and speech move listeners so powerfully that to fail to use them in a piece like this one would be self-defeating. *In Light* has three sections that can be classified as *arias*: at the end of Scene Two (mm. 354-426), and in mm. 41-70 and mm. 119-151 of Scene Five.

56

388 **24** **a tempo** (♩ = 50 **Powerful**)

Hilde

Fl.

Gtr.

Perc.

Elect.

And

*f*

*ff*

*ff*

*ff*

Kick drum

Figure 24: *I, oh I* aria, Scene Two, mm. 388-390

There are also two chant sections in the soprano part of *In Light*. These sections bookend the piece, occurring in Section D of Scene One and Section D of Scene Five. These parts were pre-recorded and played through the electronics. They are melodically inspired by the music of Hildegard von Bingen, and are meant to convey the otherworldly, ascended status Hilde achieves by the end of the opera. Inspired by chant melodies, these vocal lines tend to move in stepwise fashion, tracing an arc up from a starting point to a highest pitch (that is nonetheless not too high), before gently drifting back down.

10

Elect.

I had no de - signs on a life ill - u - mi - na - ted,

Figure 25: Hilde's chant-like vocal line in Scene One, mm. 83-85

Hilde also has some sections of vocalise, which is sung pitches without text, as in Scene Three, when she sleeps and communes with light. Additionally, the first sound in

the opera is Hilde singing the syllable “oh,” and then remaining frozen in that state and on that note (with the help of the electronics) for over a minute. This same vocalise freeze occurs at the climax of the piece in Scene Five.

One of the most successful aspects of *In Light* is the clarity of the vocal line, and this is the result of considerable effort on my part both to work with Jaimie to ensure the vocal line sits in the right part of her range for the kind of singing that is required, but also to move instrumental parts aside where they might otherwise clash with and interfere with the comprehensibility of Hilde’s vocal lines. These moments can be found throughout the opera. Since, for contemporary audiences used to popular singers and vernacular vocal styles, operatic singing can be difficult to comprehend even in the most pared back contexts, this emphasis on clarity felt aesthetically important to me.

The image displays a musical score for five parts: Hilde (voice), Fl. (flute), Gtr. (guitar), Perc. (percussion), and Elect. (electronics). The score is for measures 207 through 210. Hilde's vocal line is in treble clef with lyrics: "just a soft kind of gray, nei-ther light nor dark,". The flute part also has triplets in measures 207 and 208. The guitar part features a triplet in measure 207 and a sustained harmonic in measure 208, marked with *mf*. Dynamics include *mp* for the flute and guitar in measure 208, and *p* for the guitar in measure 210. The percussion and electronics parts are mostly silent, with a single note in the electronics part in measure 210. A rehearsal mark (15) is at the bottom of measure 207.

Figure 26: Separation of vocal notes and guitar harmonies, Scene Two, mm. 207-210

#### 4.3.2 Instrumentalist Vocals

*In Light* also makes use of the instrumentalists as vocalists. This was a choice based on an economy of the number of musicians involved. As mentioned in the Introduction, I was also inspired to try this by Du Yun’s *Angel’s Bone*, although I believe the vocalists in that piece, even though they sing, shout, whisper, and groan, are in fact

singers. This turns out to be a significant difference, because even the most talented and willing instrumentalists cannot be expected to use their voices with the same dramatic effect as do those for whom the voice is their primary instrument. I attempted to work around this structural challenge both by grouping the instrumentalist vocals together when possible, and by using delays in the live processing to soften them and make them more abstract. I think by and large these tactics were successful within the context of having non-actors / non-singers vocalizing in the opera. I am very grateful to my players for their willingness to do this, and I think any shortcomings in the overall effectiveness of these sections is due to the issues mentioned above.

#### 4.4 LEITMOTIFS AND THEMATIC COMPLEXES



Figure 27: Dynamics of *In Light's* Thematic Complexes

As mentioned in numerous places throughout this paper, I composed *In Light* in the context of four narrative thematic complexes, which were both thematic elements in the story and also musical elements. The narrative side of this equation obviously comes from the libretto; the musical connection was made primarily through the use of leitmotifs. There are too many examples of this to thoroughly detail them in the piece, so the following sections will show representative examples.

Figure 27, scanned from one of my notebooks, shows the four thematic complexes as the three human dimensions, the *not yet*, *already*, and *new*, vie for supremacy, and the *ever* emerges where it will. The numbers below the thematic complex names indicate the scenes and their major subdivisions.



#### 4.4.1 Leitmotifs of the not yet

8

45

Hilde

Fl.

Gtr.

Vibraphone

Perc.

Elect.

*p misterioso*

*f*

*mp*

*f*

*p*

*mf*

*Low bongo*

*Kick*

Figure 28: Leitmotifs of the not yet in Scene One, mm. 45-48

In Figure 28, the guitar and vibraphone play the Help/Family motive in measure 45, and then, in the last measure of the system, the vibraphone plays Hilde's motive (its first appearance in the opera). Narratively, these appear just after the narrators whisper: "But she could not see their bodies." This is in Section B of Scene One, as the very first indications of the nature of the opera are unfolding. The audience has heard Hilde's opening vocal freeze and has been informed that Hilde froze for several minutes without breathing, and in this section, the narrators have been describing Hilde's futile efforts to convince her parents that what she is experiencing is real. This is the core predicament of the *not yet*, as its emergence always seems, initially, to be incomprehensible. In some ways, the entire opera is about this moment and the possibility of learning to recognize such moments for what they really are.

#### 4.4.2 Leitmotifs of the already

10

62

Hilde

Fl.

Gtr.

Perc.

Elect.

They took Hil - de home.

They put her in her room.

High gong

Low gong

Kick

Susp. cymbal

Low tom

ff

mp

Figure 29: The Smallness motive and noise, engulfing the Hilde motive, Scene One, mm. 62-66

In Figure 29, the guitar plays the Smallness motive as a cloud of noise grows in the electronics. This compression and constriction is characteristic of the *already* as a thematic complex in *In Light*. In measure 65 the flute plays Hilde's motive as the guitar adds tremolo to the noise. This is an example of interplay between the thematic complexes: here, the *already* is attempting to annihilate the *not yet*.

#### 4.4.3 Leitmotifs of the ever

75 **4** ♩ = 72 **Radiant**

(Hilde's vocal in this section is pre-recorded. The stage is empty, a subtle, dark, mysterious, geometric and scientific light flickers)

Hilde

Fl.

Gtr.

Perc.

Elect.

**f**

**f** broadly

**f**

Figure 30: The Radiant harmony in Scene One, mm. 75-76

Out of the chaos and clutter of Section C of Scene One comes the Radiant harmony, clearing the noise and providing a broad, balanced, effortless power. Note that since *In Light's* thematic complexes take their identities from Almén's theory, and since that theory is all about how musical elements interact and establish hierarchies in the unfolding of time, what is most important to observe here is the contextual dynamic in which the Radiant harmony doesn't just appear in the piece; it dispels the cluttered noise of the *already*.

#### 4.4.4 Leitmotifs of the new

Figure 31: The Hope motive, Hilde motive and Hue sonorities, Scene Five, mm. 270-272

In measure 279 of Figure 30 above, the piccolo plays Hilde's motive, the vibraphone plays the Hope motive, and the guitar is playing one of the Hue sonorities. This example comes from the section after which Hilde has triumphed; this is the first real appearance of the *new* in the piece. In this musical arrangement, the sense of superposition between the Hope and Hilde motives is intended to reflect light's nature as neither wave nor particle.

#### 4.4.5 Overall Thematic Form

To summarize, the overall thematic form of *In Light* is as follows: the *not yet* appears, prompting the *already* to attempt to marginalize, pathologize and ultimately deny the *not yet* its right to exist. Sometimes, the *already* succeeds in temporarily weakening the *not yet*, but eventually, the *ever* emerges and, through no active efforts but simply by extension of its basic nature, the *ever* acts as a helper, enabling the *not yet* to become the *new*.

### 4.5 ELECTRONICS

The electronics in *In Light* were used in four primary ways, as described below.

### 4.5.1 Extension of Register

17

The musical score for measures 10-13 of Scene Two is presented. The tempo is marked '10 8 = 112 Anxiously'. The score includes staves for Hilde, Flute (Fl.), Guitar (Gtr.), Percussion (Perc.), and Electronics (Elect.). Hilde's vocal line begins with the lyrics 'Four days, Hil - de.' in measure 11, marked 'mf' and 'angushed'. The Flute part features a 'humming + note' in measure 11. The Guitar part includes a 'pami' marking in measure 10 and a 'p' marking in measure 11. The Percussion part includes 'Susp. cymbal' in measure 10, 'Low wood' and 'High wood' in measure 11, and a '3' marking in measure 12. The Electronics part features a circled '18' in measure 10 and a '15th' marking in measure 11. The score is marked with 'pp' (pianissimo) and 'mf' (mezzo-forte) dynamics.

Figure 32: Extreme low pitch extension via electronics, Scene Two, mm. 10-13

In numerous places, especially in Scene Two, fixed media files are used to extend the range of the ensemble to extremely low pitches. In the example above, as Hilde begins to describe the events of the past four days, the electronics plays a D-flat two octaves below the bass staff. These fixed media files were generally made using the midi playback from the Sibelius score. The individual staves were exported as audio files, processed in various ways, and then played back in the Max patch.

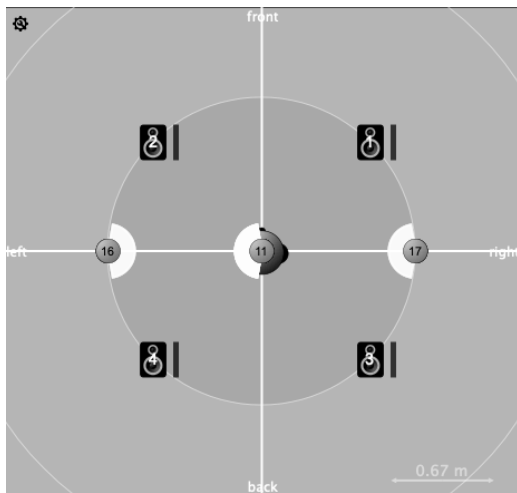
### 4.5.2 Timbral Diversity and Duplication

Given the instrumentation limitations, I was interested in finding ways to alter the sound of instruments at appropriate places to relieve what might become fatigue or boredom for the audience, especially in listening to acoustic guitar, flute, and vibraphone for nearly an hour. In Scene Five, much of the guitar part is processed with filters, distortion and delay, in the hopes of approximating the timbre of a distorted electric guitar. In the premiere, these timbral changes were more subtle than I would have liked.

This is due to the challenges of managing volume levels as they enter the patch from the instrument microphone, and of maintaining good levels as the signal is passed around to the various sound processing modules within the patch before being sent out to the mixer and speakers. Other timbral diversity effects used in the piece include delays used on brake drum hits, pitch shift on both the guitar and the flute, and delays used on various instruments and vocals.

Finally, In Scene Five I used a live buffer recording module to capture a repeating figure played by the flute and then to trigger that figure so that it looped indefinitely. This not only added a second virtual flautist to the ensemble, but it moved the acoustic flute sound into the speakers surrounding the audience, and allowed the flautist to play a melody with its own textural accompaniment.

#### ***4.5.3 Spatialization***



*Figure 33: SPAT software, basic speaker and sound channel setup for In Light*

Spatialization of sounds, both from the fixed media files and the live performance, is an essential part of *In Light's* sonic character. Using the SPAT software, I was able to

play stereo sound files and have them circle the theater and the audience. My goal in doing this was to destabilize things, to impart a feeling of things being unbalanced and surprising. In Scene Two, during the section where Hilde describes her experience looking at the birds, I used spatialization to take the live microphone input from the flute, which was playing bird calls, and move each call to a different speaker. And in Scene Four, the fixed media file was made beforehand such that seventeen different sound sources (tracks of audio) were randomly moved around the four speakers.

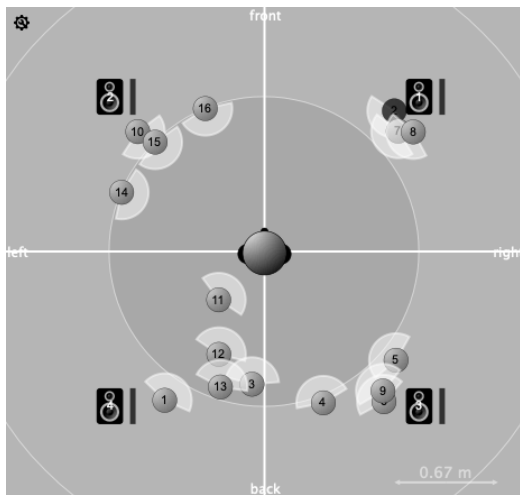


Figure 34: Still image from the moving dispersion of 17 channels of audio

#### 4.5.4. The Uncanny

*In Light* begins and climaxes with Hilde's vocal freeze, which is a gesture that would be impossible without the use of electronics. Using a spectral freeze plugin, the electronics player captures a few seconds of Hilde's vocal note, sung live, and then, by pressing the space bar on the laptop, freezes that sound, which then plays back indefinitely until the electronics performer presses the space bar again. The technical dimensions of this gesture are relatively simple; what is most important to mention in this

musical analysis is that the purpose of this gesture is to generate a moment of uncanniness, of mystery. This harkens back to the seemingly impossible results of the double slit experiment, and of the uncanny, but actual, behavior of light.

## 4.6 MUSICAL DETAILS

### 4.6.1 Subtractive Processes

There are numerous references in this paper to the fact that light is silent, and, in the Introduction, to my desire to create a piece that perches on the threshold of something so vast and real (or perhaps, in the sense of quantum mechanics, so small and real) that the natural human reaction is silence, awe, wonder. Perhaps this is why subtractive processes recur throughout *In Light*. Of course, the narrative of Scene Two also includes four disappearances, three of which are accompanied by subtractive processes, so perhaps that is the source. It is telling, however, that in some of my early notes about Scene Four of the opera, I mentioned the idea of a silent movement, in which the only activity is the movement of light.

The musical score for Figure 35 shows five staves: Hilde, Fl., Gtr., Perc., and Elect. The Hilde staff has a long note in measure 365 labeled 'Light,'. The other instruments have notes in measures 362-364, which are removed in measure 365.

Figure 35: Removal of musical elements at key arrival, Scene Two, mm. 362-365



Figure 35 shows an ascending scalar line, played in loose canon by the flute, guitar and vibraphone, leading up to a final pitch which is sung without accompaniment by the instruments.



Figure 36: Subtractive arpeggio in Scene Two, mm. 170-172

Figure 36 shows another subtractive musical process: a seven-note triadic pitch collection stated in ascending and then descending arpeggiation in which, on each successive descent, the first note of the previous cycle is omitted. This is a musical phenomenon of disappearance, with the lowest notes gradually disappearing from the collection.

These types of processes are not uncommon in *In Light*. Perhaps the most important of them all occurs at measure 211 of Scene Five, when in the midst of a chaotic texture Hilde suddenly freezes and all sounds drop out except her vocal note and a low drone.

#### 4.6.2 Gestural and Timbral Sections

*(Hilde on stage, cannot see people, we see images suggesting a Caretaker entering, speaking to Hilde. We see her alarm as the Caretaker grabs her and begins to take her off stage. She struggles.)*

The musical score for measures 53-56 is presented for five instruments: Hilde, Flute (Fl.), Guitar (Gtr.), Percussion (Perc.), and Electric Bass (Elect.).

- Hilde:** Measures 53-54 are silent. In measure 55, she has a vocal line marked *f nearly shouting* with the lyrics "Her par-ents were terr-i-fied." This line continues into measure 56.
- Flute (Fl.):** Measures 53-54 feature rapid, high-pitched flurries of notes, marked *ff*. In measure 55, the flute plays a short, sharp note, also marked *f nearly shouting*.
- Guitar (Gtr.):** Measures 53-54 show a tremolo on a single note, marked *ff sempre*. In measure 55, there is a string bend marked *L.v.* (lento/vivace). In measure 56, the guitar plays a *rasgueado* (rhythmic strumming) marked *f nearly shouting*.
- Percussion (Perc.):** Measures 53-54 include a *Brake drum*, *Low gong*, *High gong*, and *Susp. cymbal*, all marked *ff*. In measure 55, the *Brake drum* and *Low gong* continue. In measure 56, the *Brake drum*, *Low gong*, and *Susp. cymbal* are present.
- Electric Bass (Elect.):** Measures 53-54 are silent. In measure 55, the bass plays a low, sustained note marked with a circled 8. In measure 56, the bass continues with a similar low, sustained note.

Figure 37: Gestural and timbral passage, Scene One, mm. 53-56

Given the limitations created by the small ensemble, I chose to use gestural and timbral sounds as a means of extending the sonic world of the piece. In the example above, the flute plays high flurries of pitches which come across more as shrieks than as musical notes, the guitar tremolos and bends a string by a quarter tone, and the percussion plays chaotic and non-aligned figures. Elsewhere in the piece, the score calls for the flautist to hum unison pitches while playing, to bend pitches while flutter-tonguing, and to make percussive sounds.

The musical score for measures 45-48 of Scene Four is presented for five instruments: Hilde, Flute (Fl.), Guitar (Gtr.), Percussion (Perc.), and Electric Bass (Elect.).

- Hilde:** The staff shows whole rests for all four measures.
- Flute (Fl.):** In measure 45, a half note is played with a *mf* dynamic. A slur spans measures 45 and 46, leading to a half note in measure 47 with a *f* dynamic, which then transitions to a half note in measure 48 with a *p* dynamic.
- Guitar (Gtr.):** In measure 45, a half note is played with a *mf* dynamic. A box contains the numbers 1, 6, and 5. A slur spans measures 45 and 46, leading to a half note in measure 47, and another slur spans measures 47 and 48, leading to a half note in measure 48.
- Percussion (Perc.):** The staff uses 'x' marks to represent rhythmic events. In measure 45, a half note is marked with a *mf* dynamic. A box labeled "High gong" is positioned above the first 'x'. Measures 46, 47, and 48 each contain three 'x' marks, with a '3' above each group, indicating triplets.
- Electric Bass (Elect.):** The staff shows whole rests for all four measures.

Figure 38: Elemental sounds in Scene Four, mm. 45-48

The most exciting timbral and gestural moments in the score can be found in Scene Four. Over the Radiant harmony, the ensemble plays a series of elemental sounds. These sounds recall a kind of percussive ritual clatter (loosely inspired by Tibetan horns and cymbals as well as gamelan gongs). The percussionist plays only metals, scraping the suspended cymbals occasionally, but mostly playing opera gongs, with their indeterminate pitch and glissandos. The flute plays its notated pitch while humming the unison. The guitar plays a technique, demonstrated to me by the guitarist Thomas Echols, in which the player scoops his finger under the fifth string, pushing that string up and fretting the sixth string under it, so that the fifth string overlaps the sixth but is not fretted against the fretboard. This produces a percussive, gamelan-like sound which nonetheless also has a sense of a central pitch. I believe this gesture fits so well here because it scratches the surface of normalcy to reveal, at even the shallowest level, a consistency

that to us is nonetheless ungraspably complex. In doing so, it enacts something similar to the strange yet law-bound behavior of the quantum world.

#### 4.6.3 Segmentation



Figure 39: Segmentation in the vocal line, a whole-tone segment, Scene Two, mm. 58-63

Throughout *In Light*, groups of pitches unfold in time in segments that are used to signal the character of the moment, or to indicate and point to the thematic complexes referred to throughout this paper. These examples can be found on every page of the score, and were described in the Section 4.1.3 above. In the example above, the choice of pitches as Hilde sings “I froze” comes from the whole tone scale, and is used to signal dilation and uncanny possibilities.

In Figure 40, Hilde sings a pentatonic segment as she contemplates light and the ever.

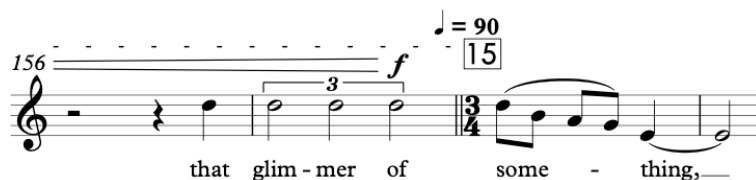


Figure 40: Segmentation in the vocal line, a pentatonic segment, Scene Two, mm. 156-159

In Figure 41 below, the vocal line moves from a modal line, as Hilde ponders the possibility that she may not be ill, to a rising whole-tone segment on the words “rather I am healing,” followed by the I, oh I motive, which is not long enough to convey any sense of segmentation, and which rather provides a kind of angular conclusion to things.



Figure 41: Segmentation in the vocal line, mixed segments, Scene Two, mm. 408-416

#### 4.6.4 Harmony

Many of the harmonies found in *In Light* are triads or trichords. To me, compared to single pitches or dyads, triads bring clear associations and colors into music. Presented without any complicating context, I do not think such colors are particularly interesting or affecting in contemporary chamber music; but when the clear signal of a triad is combined with other sounds that conflict with it, interesting things seem to happen. This dynamic can be seen in the Radiant harmony, with its C major triad combined with stacked fifths on B-natural; and in the Hue sonorities. These sonorities pair (generally) consonant triads (major, minor and augmented) with consonant thirds and sixths. Each of the separate sonorities (the triads and dyads) are fairly vanilla on their own, but in combination, their internal consonances seem to both intensify the dissonance but also somehow balance it out. Sonorities such as this appear throughout the opera. Elsewhere, tritones and Z-cells provide a counter-balancing paradigm.

In the course of composing this piece, I analyzed my basic harmonic materials based on their Forte pitch-class set numbers, and several sets appeared in many different sets of harmonies. The most common were the major triad and the stacked fifths sonority, which are the very ones that comprise the Radiant harmony, the first harmony I was drawn to in creating this piece. What is interesting to me is the variety of forms in which

these elements entered the piece, since I never wrote anything with a sense of triadic harmonic accompaniment. Even the Hue sonorities were actually created through the process of generating scalar collections, and were only repurposed as harmonies once that process yielded nothing of value.

Forte Name	Source
3-9 (0 2 7)	Radiant harmony upper voices
	Hope motive triad 1
	Hope motive triad 4
	Row hexachord 1 upper voices
3-11 (0 3 7)	"Violet" hue sonority P & I
	"Orange" hue sonority P & I
	Radiant harmony lower voices
	Hope motive triad 2
	Row hexachord 2 lower voices
	Abandonment motive

Table 10: Forte pitch-class-set commonalities in *In Light* harmonies

#### 4.6.5 Meter

##### 4.6.5a – Scene Three Metric Design

The formal cuts to Section A of Scene Three have been described above. The metric design of the original concept is included here, because it will form the basis for future development of the scene, and because it illustrates something about *In Light*, and about my approach to meter, that is not reflected elsewhere in the opera.

In my pre-compositional notes for Section A of Scene Three, I wrote that it should illustrate “the difference between Hilde and her family, between the *not yet* and the *already*,” that it should intensify the conflict and the split between Hilde and the world she has known up until this time. Musically, this was to be expressed in a split

ensemble, with the percussionist playing in two meters, 7/8 and 5/4. In this arrangement, in which both meters share the same eighth note, the meters share a downbeat every seventy eighth notes (ten measures in 7/8, five measures in 5/4). Each seventy eighth notes, then, is understood be a cycle. The scene was composed with a short introduction followed by fourteen complete cycles, during which the various elements progress, interact and eventually collide.

In these cycles, the guitar and the tom-toms play in 5/4, the piccolo, Hilde, and the kick and triangle are in 7/8, and the caretakers are unmetered until the last three cycles, when they are in 7/8. Through the scene's fourteen cycles, the guitar plays a repeating succession of sixteen Z-cells. The scene began with an introductory passage played solo by the guitar in which all sixteen harmonies are played in one cycle, in the manner of a kind of very simple cadenza. Then, beginning at the next cycle, the guitar locks into playing each harmony in its cycle for an entire measure of 5/4. This guitar part is supported by a rolling drum pattern on the toms in 5/4 that never varies.

Meanwhile, the piccolo and Hilde play a melodic motive in 7/8 which represents the *not yet* and Hilde's amazing transformation. This melodic pattern is angular and is in the same general musical family as the I, oh I motive, but it was written by ear and chosen mostly for its oddness, and for its evocation of the uncanny. In the original version of this scene (which is the only version that really projects a cohesive musical and dramatic idea), the piccolo and triangle come in after the guitar introduction (cycle 1) and one full cycle of seven measures of 5/4 (cycle 2).

Cycle		1	2	3	4	5	6	7	8	9	10	11	12	13	14
5/4	Toms		x	x	x	x	x	x	x	x	x	x	x	x	x
	Guitar	x	x	x	x	x	x	x	x	x	x	x	x	x	x
7/8	Piccolo			x	x	x	x		x	x		x	x	x	x
	Hilde						x			x		x	x	x	x
	Triangle			x	x	x	x	x	x	x	x	x	x	x	x
	Kick Drum					x	x	x	x	x	x	x	x	x	x
N/A	Caretakers			x				x	x		x				
7/8													x	x	x

*Table 11: Scene Three, Section A, instrumental arrangement in original version*

This is some of my favorite music in the opera. However, for this to work, there will certainly have to be other solutions. For one thing, it is not realistic to expect a single percussionist to handle the original part, not so much because it is so technically demanding - it really is a repeating pattern on a grid of shared eighth notes - but because this kind of music requires more of an internalized rhythmic sensibility. It is, essentially, closer to rock or jazz, and musicians will need considerable rehearsal and probably some spatial separation to achieve the proper music result. In future productions, I may call for two small speakers to be placed in different areas of the stage, with fixed media rhythm tracks in the two meters on them. While the two meters need to be in time with each other (a simple technical problem to solve), I would like to have each sub-ensemble play without listening to the other, so that each meter really feels solid and musical and that the only people who really catch the overall combination of the two meters would be the audience. That would fit the narrative and thematic requirements well.



#### 4.6.5b – Metric Modulations

*In Light* also makes use of the technique of metric modulations in two parts of Scene Two. In the first modulation, which spans measures 283-286, the ensemble is moving from 3/4 at 140bpm to 4/4 at 110 bpm. By playing triplets of 2:3 at 140bpm, the “quarter note” pulse is approximately 93 bpm. From there, the ensemble accelerates slightly until the triplets are happening at  $q = 110$  and they are able to transition smoothly into the new tempo.

In the second modulation, which begins at measure 320, the ensemble is at  $q = 116$ , and the flute begins to play Hilde’s five-note motive, accenting each initial note and thus creating the sense of 5/8 meter. The guitar, still playing octave B naturals, also accents every fifth eighth note with the flute, and Hilde’s last two vocal notes arrive on “downbeats” of the 5/8 metric feel, as well. In measures 325-327, when we arrive at the new meter of 5/8, this meter has been prepared by the foregoing accents.

#### 4.6.6 Instrumental Details, Figuration and Ostinatos

Before concluding the musical analysis, a few instrumental details bear mentioning.

##### 4.6.6a – Figurations

The musical score for measures 68-71 of Scene Two features a repeating guitar figuration. The score is written for five staves: Hilde (Vocal), Flute (Fl.), Guitar (Gtr.), Percussion (Perc.), and Electric (Elect.). The guitar part is characterized by a continuous eighth-note triplet pattern, marked with a *mf* dynamic. The flute part features a five-note motive, marked with a *p* dynamic. The vocal part includes lyrics: "When I came to, I saw the world with ev'ry thing in place,". The percussion part is marked with a *mf* dynamic. The electric part is marked with a *mf* dynamic. The score is numbered 68 at the beginning of the first measure.

Figure 42: Example of repeating guitar figuration, Scene Two, mm.68-71

In the guitar part, I used idiomatic, cycling guitar figuration in several sections of *In Light* to establish a sense of persistent background harmony and to create a sense of motion even as the harmony remained the same. Figurations of this kind appear in Scenes One, Two, and Five.

#### 4.6.6b – Ostinatos

62 29 ♩ = 112 Intimate

Hilde

Alto Flute

Guitar *pp hushed* *sempre*

Crotales

Electronics

Figure 43: Ostinato, Scene Three, Section B, mm. 62-65

Section B of Scene Three is based on a consistent guitar ostinato - a major seventh chord with doubled seventh. The ostinato moves freely, transposing without ever altering its intervallic pattern: an ascending minor second to an ascending major third to an ascending perfect fifth. In composing this section, I had no transpositional system in mind. I tried only to follow and reveal Hilde's experience in her melodic line.

Figure 44: Starting pitches of guitar ostinato in Section B, Scene Three

Even so, there is a kind of organization implied in the transpositions of the ostinato. As shown in Figure 44 above, these transpositions can be understood as a series

of departures from A-flat which express a narratively meaningful trajectory. In the first departure, the ostinato generally moves downward, and its final pitch is a diminished seventh below A-flat. In the second departure, the ostinato moves down initially by a perfect fifth, then remains within a major second above that pitch, ending on an E-flat a perfect fourth below A-flat. In the third departure, the ostinato begins by stepping down by a major second, but then, for the only time in the scene, actually moves above A-flat to B-flat before ending at A-natural, an augmented unison above A-flat. In the fourth departure, the ostinato moves down by whole step from A-flat to G-flat, then by half step to F-natural, ending there, a minor third below A-flat. In the fifth departure, the ostinato moves down by thirds, from A-flat to F-natural to D-natural, before ending on G-natural, a semitone below A-flat. The scene then ends with four measures of the ostinato at A-flat. This pattern shows a dynamic in which Ab becomes gradually more stable or central, in which the departures from Ab become shorter and less distant.

#### 4.6.6c – Cadenzas

Figure 45: Alto flute cadenza #2 from Scene Three, Section B, m. 98

Scene Three, Section B also contains five alto flute cadenzas, which are based on three musical sources. Cadenzas 1-4 use the guitar ostinato as transitional material,

sometimes beginning with a version of the ostinato, other times ending with one. Cadenzas 1 and 5 also use Hilde's Ascended motive, in which rising fifths are followed by descending fourths. The main musical source for the flute cadenzas, however, comes from *Remain in Light*, the Talking Heads album mentioned above. In one of its tracks, "The Great Curve," there are angular, articulate guitar solos, played by Adrian Belew. The cadenzas are based on transcriptions of phrases from Belew's guitar solos from this track. I chose these melodic elements here for several reasons. First, they are both highly angular and very fluid, and as I hear them, they have a fast, light-light kind of quality. Secondly, I wanted the cadenzas here to have a feeling of coming from someplace beyond Hilde's world and in some ways beyond the world of the piece as we have heard it up until now.

## Chapter 5: Conclusions

*In Light* is my second chamber opera, and the capstone work of my doctoral studies. In several ways, it is a representative piece. My musical work, whether in songwriting or classical composition, has often included text, and so it is perhaps no surprise that I have arrived at opera as the genre in which I am most interested. I love the collaborative nature of opera, I like the excitement of theatrical productions, I enjoy working with singers, and much of my work is concerned with themes that are specific enough to benefit from the kind of narrative that opera allows. Additionally, I have composed a number of pieces for guitar, enough to know that no one can ever call themselves an expert in writing for this peculiar instrument. Nonetheless, *In Light* represents a significant step forward in my writing for the guitar. Similarly, *In Light's* electronics design is the most complex and ambitious patch I have yet made. The use of electronics within chamber opera, as well the use of quadrophonic sound and an active approach to spatialization, feel like creatively interesting, significant dimensions of my work. Finally, the vocal writing in this piece was effective. Continuing to develop the ability to write vocal music that singers want to sing will be a critical endeavor as I move forward and seek new opportunities.

I am excited to resume development of this piece, taking the best of this initial version and eliminating or redeveloping elements that did not work. The process will be built around the centrality of light in this project, both as design element, but also as an organizing force for all other elements, be they musical or narrative. I plan to find a light artist with whom I can collaborate, beginning with development of a physical, three-dimensional light entity of some kind with which Hilde can interact and within which Hilde can physically stand and sing and move. I am interested in the possibility of multiple narratives, such that perhaps the lighting follows one narrative and the drama

follows another. To develop this notion into something powerful and effective, I will find a dramaturg/librettist, to rethink and possibly rewrite the libretto, and to collaborate on the overall narrative arc(s) of the piece. I am interested in exploring a less linear narrative structure for Hilde's story, and in finding ways for Hilde to spend more time during the opera dwelling in a direct confrontation with light itself. Musically, I feel that the piece will benefit from at least one additional instrument, something that reaches solidly into the bass range and which can sustain pitches easily. My preference will be to add bass and synthesizer. Additionally, if possible I will add at least one additional singer, so as to relieve the instrumentalists of the pressure to do vocal parts. With a new team in place and a clear new concept based on the original ideas and plans I developed, we will be in a good position to seek grants and to pitch the project, either as a full work or in shorter, workshop-friendly pieces, to presenters.

Ultimately, *In Light* felt like a successful piece, even as the staging and lighting design fell victim to circumstances somewhat out of our control. I am grateful to my teachers and collaborators and to the musicians who worked with me through the tumultuous months of its creation.

## ***In Light – Libretto***

Adapted with permission from *Peitho and the Night* by Hannah Kenah

### **SCENE 1**

NARRATORS:

Hilde froze in the middle of speaking a word.  
She froze for several minutes without stopping or breathing.  
Impossible...

She told her parents...  
something they could not believe.  
She told them she could see the room,  
the window, the walls, the chair.  
but she could not see their bodies.

Her parents were terrified.  
They didn't know what to do.  
They took Hilde home.  
They put her in her room.  
They worried.

HILDE (recorded):

I had no designs on a life illuminated,  
but sometimes, fate or chance assigns a soul to be brought low or to be elevated.  
Which of these two outcomes my story represents, you people may decide.  
I well know the portions of good and bad that I would place on either side.  
I was remade by events which others could not accept.

When, upon an ordinary day, all light, for me,  
ceased to reflect off of every object equally,  
when in a sudden break my sight shifted quantum,  
chance, or fate, my ordinary hopes did take, and sent them careening,  
with all that is Hilde on them.

### **SCENE 2**

HILDE:

Four days, Hilde.

Four days here.  
Four days of frustration and pain, Hilde.

Four days of changes, Hilde.  
Four days of loss.  
But also, Hilde, four days of gain.  
Four days of being patronized.  
Four days alone,  
but I am not ill!  
I do not feel ill!  
Nobody believes me, but I am not ill!  
Hilde.  
Tell your story to yourself.  
Stay sane, Hilde, stay sane.

Day one,  
I was at school talking to some friends.  
I froze with a word half in, and half out of my mouth.  
When I came to,  
I saw the world with everything in place,  
but with every human body gone.  
I could still hear bodies.  
They were still there.  
I saw footsteps in the grass,  
footprints were appearing as I stood on the field.  
They were there but I could not see them!

Four days, Hilde.  
Four days here.

Day two.  
I was looking at the birds.  
I felt lightheaded for a moment.  
When I looked again, the birds, their bodies were gone.  
The birds, gone.

I told my mother. she didn't speak at all.  
I could not see her.  
I am so alone.

But Hilde, Hilde,  
there is also, there is also that glimmer of something,  
a comfort in the gloom...



The third day,  
Hilde,  
I was sitting outside.  
The sun was shining in the sky.  
When, when,  
I felt that strange timeless thing.  
The light changed somehow.  
And then, in the sky, where just before the sun had shone: nothing!  
Nothing, just a soft kind of gray, neither light nor dark, luminous, but dim.  
I closed my eyes to spare myself the agonizing sight of a sunless world.

Oh,  
Hilde, day four.  
Yesterday.  
Sitting in this room.  
What is there to say?  
Just another frozen moment,  
I felt neither here nor there,  
Suddenly, suddenly, Oh!  
Suddenly everything, Oh!  
Suddenly everything was gone. Everything was gray.

Now here I am inside a gray kind of glow,  
with light from everywhere and nowhere,  
it is featureless, formless, with beams and shines coming and going.

Hilde, think of it, the glimmering thing, the flicker of light, growing,  
Hilde, how does it feel?  
How does it feel?

Inside me something lives, the essence of sight,  
inner, luminous bliss.  
Though I'm lost in this gray,  
I am found.  
As I see less each day, silent bells chime,  
and Oh! and Oh! this haze, when my fear recedes, it is so lovely.  
It is invisibly ablaze, with something that my soul now needs.

Light, moving in space, is black, it's gone, impossible to trace,  
unless a thing intersects its long, long line.  
And then will it will be that thing, and not the flying ray  
that will appear, as if to say light is and is not here.

And I, oh I, Hilde!  
I, oh, I am that thing!  
Embraced, cocooned in an immense glimmering.  
And I, oh I, seeing things anew, seeing physical math.  
Perhaps this gray is true, and where I go, light will be my path.  
Perhaps I am not ill, but rather I am healing.  
I, oh I!  
I, oh I!  
I, oh I,  
I am that thing.  
I am that thing!  
I am that thing!  
I am that thing.

Oh!  
Who's there?

### **SCENE 3**

HILDE:

Ah....

CARETAKERS:

Something is wrong with her.  
She is ill.  
We don't know how but she is ill.  
She told us she sees some things but not others  
Walls but not bodies, sky but not birds.  
She said she could see the wall behind us,  
but she could not see our bodies.  
She says she only sees light in some original state  
She is ill...

HILDE:

I am well....

What is this in the luminous gray?  
I feel something, like a mind communicating.

I can read this field its particles transferred, its meaning revealed,  
as if I am hearing an unspoken word.

I must make a choice.

Ah, I see tomorrow if I leave this room, I will regain my vision!

Ah, but wait, there will be a cost, because for the sight that I regain,  
this new connection will be lost.  
Lost, and all light will be mundane.

Oh this is not so easy. It is a cruel kind of choice.  
I can leave this room tomorrow and resume my life.  
Or what? Stay in this limbo?  
I can hardly see. If I stay this way, what will I do?  
How will I exist?  
And I do want to see colors again, and the sky, and land, and the sun, women and men.  
My own hand.

Ah, I understand, there is still more.  
If I choose to stay, there will be a final change.  
Lightless eyes for good, no going back.  
Hilde, Hilde, forever a girl under a hood.

#### **SCENE 4**

Instrumental/Light

#### **SCENE 5**

HILDE:

Who's there?

CARETAKERS:

Your family wants to see you.  
Come out of this room for a few minutes.

HILDE:

Ah, so here it is, the time to choose.

Wait, why?

CARETAKERS:

We are concerned.  
Your mother is heartbroken.  
Your father has hardly spoken since Wednesday.  
Everyone is hoping you will get better.  
Hilde... (Caretakers repeat this several times)

HILDE (to herself):

Bright, whispering traces, can I leave you?  
Brilliant, shimmering channel, I am tempted.  
Pure, flickering whisper, I am frightened.  
I am frightened.  
Glowing patterns, I might not miss you.  
Light, light, light, I might forget you.

Ordinary life again, seeing and doing.  
I have barely begun to live.  
I hardly know what I want.  
How can I sacrifice myself?  
How can I give up my life before it has begun?

No, common sense, Hilde, and reasonable fear demand that this miracle be undone.

But wait, even to say these words en route to a decision,  
weighs my spirit down, and makes makes an incision  
between the thrill of this thing, however scary,  
and some deep innate will I must not bury in mere comfort or safety,  
however much I desire it.

Even if it means I lose it all, if I lose it all.  
If I'm never free, and never see again.  
Oh! Oh! Oh!  
My joy.  
My darkly shining joy.  
My joy will survive if my eyes stay dim.  
Light, light, light.

Oh! Oh!  
Yes. Yes.

I am decided.  
Oh, it feels right,  
I will take this beam and ride it.  
Remain in light.

HILDE (to Caretakers):

Wait, I cannot leave yet.  
Tell everyone I am too tired.  
I will talk to them tomorrow.

CARETAKERS (to themselves):

We cannot wait any longer,  
We need to intervene.

CARETAKERS (to Hilde):

Just stay calm, everyone is waiting,  
You must come with us now.  
It will only be for a little while.  
Hilde... (Caretakers continue to call "Hilde" through next stanza)

HILDE:

No! Stop!  
I need to stay here.  
You do not understand,  
I cannot leave.  
No!  
Stop!  
I have decided.  
You do not understand.  
I cannot leave.  
Stop!  
I have...  
CHOSEN! (Hilde freezes on this word)

Ah I cannot see, and yet,  
oh, where the light is, I feel!  
Where I go, light precedes me.  
I know because light leads me.

This bed, those walls are here and here.  
I know because I feel where the light falls.  
A voice in my inner ear or in my knowing,  
something glowing has come into being.  
So now I see this cell perfectly well.  
I know the way out.  
Ah  
Hilde, Hilde, Hilde.

HILDE (recorded):

I had no designs on a life illuminated,  
but sometimes, fate or chance assigns a soul to be brought low  
or to be elevated.

Which of these two outcomes my story represents, you people may decide.  
I well know the portions of good and bad that I would place on either side.

I was remade by events which others could not accept.

## In Light

## Scene 1

(Lights up on HILDE, center stage. She sings, freezes in the middle of a word, and stays frozen through the section.)

Michael Thomas Zapruder

**♩ = 100 Placid**

***f***

Hilde

Oh

Flute

Guitar

Percussion

Electronics

①

②

≡

5

***mf***

Hilde

Fl.

***p even***

Gtr.

***p even***

Vibraphone

Perc.

***p even***

Elect.

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9

Hilde

*mp speaking*

Hil - de froze in the mid - dle of speak - ing a word.

Fl.

*mp speaking*

Hil - de froze in the mid - dle of speak - ing a word.

Gtr.

*mp speaking*

Hil - de froze in the mid - dle of speak - ing a word.

Perc.

Elect.



13

Hilde

She froze for sev' - ral mi - nutes with - out stop - ping or breath - ing

Fl.

She froze for sev' - ral mi - nutes with - out stop - ping or breath - ing

Gtr.

She froze for sev' - ral mi - nutes with - out stop - ping or breath - ing

Perc.

Elect.



17

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

*mf*



21

Hilde

Fl.

Gtr.

Perc.

Elect.

Im - poss - i - ble.

Im - poss - i - ble.

Im - poss - i - ble.

③

25

(When the note ends,  
Hilde runs off stage.)

Hilde

Fl.

Gtr.

Perc.

Elect.

④



31 **1** ♩ = 63 Smoothly

(Hilde returns, walking with her hands outstretched. Hilde acts out actions shown by projections and described by narrators.)

Hilde

Fl.

Gtr.

Perc.

Elect.

*f* legato

*p* sempre legato cresc.

⑤

33

Hilde

*p* *whispering*

She told her par - ents.

Fl.

*p* *whispering*

She told her par - ents.

Gtr.

*mf*

*p* *whispering*

*dim.*

Perc.

Vibraphone

*f* *legato*

Elect.



35

Hilde

Some-thing they could not be - lieve.

Fl.

Some-thing they could not be - lieve.

Gtr.

*p* *cresc.*

Perc.

Wood blocks

*p* *3* *mf* *ppp*

Elect.

37

Hilde

Fl.

Gtr.

Perc.

Elect.

*f*

*dim.*

Vibraphone



39

Hilde

Fl.

Gtr.

Perc.

Elect.

She told them she could see the room,

the win - dow, the walls,

*p*

*f*

*p*

*ff*

*p*

*f*

Wood blocks

Kick drum

41

Hilde

Fl.

Gtr.

Perc.

Elect.

the chair,

che

*ppp* *f* *ppp*

*cresc.*

*ff*

[Bongos - w fingertips]

*ppp* *f*



43 **2** Più mosso ♩ = 69

Hilde

Fl.

Gtr.

Perc.

Elect.

but she could not see their bo - dies.

but she could not see their bo - dies.

but she could not see their bo - dies.

but she could not see their bo - dies.

[Susp. cymbal (on bell)]

*p*

*p*

15<sup>ms</sup>

45

Hilde

Fl.

Gtr.

*p* misterioso *f* bis. *mp* bis. *f*

[Vibraphone] *p* misterioso *mp* *f*

Perc.

[Low bongo] *p* *mf* [Kick]

Elect.



49

Hilde

Fl.

Gtr.

*p* *mp* *p* *p* *f* *pp*

Perc.

[Kick]

Elect.

3

*(Hilde on stage, she cannot see people. A Caretaker enters speaking to Hilde, and we see her alarm as the Caretaker grabs her and begins to take her away. She struggles.)*

62

Hilde

Fl.

Gtr.

Perc.

Elect.

They took Hil-de home.

They took Hil-de home.

They took Hil-de home.

They put her in her room.

They put her in her room.

They put her in her room.

High gong

Low gong

Kick

Susp. cymbal

Low tom

*ff*

*mp*



**molto accel.** . . . . .

67

Hilde

Fl.

Gtr.

Perc.

Elect.

They wor-ried.

They wor-ried.

They wor-ried.

Susp. cymbal

*p*

*ff*





83 **5** ♩ = 80 **Rubato**

Hilde

Fl.

Gtr.

Perc.

Elect.

(10)

I had no de - signs on a life ill - u - mi - na - ted, \_\_\_\_\_

High Tom

Low Tom

*mf*

92 **Più mosso** ♩ = 56

**a tempo** (♩ = 80 Rubato)

Hilde  
 Fl.  
 Gtr. *mf*  
 Perc. *mf* [Vibraphone]  
 Elect.

94

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

12 13

Which of these two out-comes my sto - ry rep-re-sents, you peo - ple may de - cide.

98

**Più mosso** ♩ = 56

Hilde  
 Fl.  
 Gtr. *mf* *f* *p* *f* *mp* *f*  
 Perc. *mf* *f* *p* *f* *mp* *f*  
 Elect.

[Kick]

102 **a tempo** (♩ = 80 Rubato)

Hilde

Fl.

Gtr.

Perc.

Elect.

14

I well know the por-tions of good and bad that I would place on eith - er side.

105 **Più mosso** ♩ = 56 **a tempo** (♩ = 80 Rubato)

Hilde

Fl.

Gtr.

Perc.

Elect.

15

I was re - made by e - vents which oth-ers could not acc - ept.

109 **6** **Meno mosso** ♩ = 50

Hilde

Fl.

Gtr.

Perc.

Elect.

16

When, up-on an ord-i-na-ry day, all light, for me, ceased to re -flect off of ev-ry ob-ject eq-ual-ly,

113

Hilde

Fl.

Gtr.

Perc.

Elect.

*mp*

*mp*

when in a sud - den break my sight shift - ed quan - tum,\_\_\_\_



115

Hilde

Fl.

Gtr.

Perc.

Elect.

chance, or fate,\_\_\_\_ my ord - i - na - ry hopes did take,\_\_\_\_ and sent them ca -



117

Hilde

Fl.

Gtr.

Perc.

Elect.

ree - ning,\_\_\_\_ with all that is Hil - de on them.\_\_\_\_

120

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

4

17

4/4



## Scene 2

(Sunday Evening. Hilde is alone in her room.)

1

7 ♩ = 60 Lonesome

Hilde

Flute

Guitar

Percussion

CPU

Vibraphone

*p*

4/4



5

Hilde

Fl.

Gtr.

Perc.

Elect.

10 **8** = 112 Anxiously

Hilde *mf* *anguished*  
Four days, Hil - de.

Fl. *pp*  
*pami*  
[humming + note]

Gtr. *pp*  
*p*

Perc. *pp*  
[Susp. cymbal] [Low wood] [High wood]  
3 *mf* *pp* 3 *mf*

Elect. **18**  
*b5<sup>mb</sup>*

==

14

Hilde Four days here. Four days

Fl. *f* *pp*

Gtr. *mf* *p* *mf* *p*

Perc. *pp* *mf* *pp* *p*  
[Kick]

Elect. *b5<sup>mb</sup>* *(t5)*

18

Hilde of frust-ra - tion and pain, Hil - de.

Fl.

Gtr.

Perc.

Elect.

19

(45)

22

Hilde Four days of chan - ges, Hil - de. Four days of loss. rit. . . . .

Fl. humming + note

Gtr.

Perc.

Elect.

(45)

27 ♩ = 80

Hilde But al - so, Hil - de, four days of gain.

Fl. *p dolce*

Gtr.

Perc. *p*

Elect.

*f*

*mf poco secco*

Vibraphone

*f legato*

*ff*

3/4



32 **9** A tempo (♩ = 112)

Hilde: Four days of be ing pa - tro-nized.

Fl.: *pp* *mf* *p*

Gtr.: *pp*

Perc.: Susp. Cymbal, *pp* Kick

Elect.: 20



36

Hilde

Fl.

Gtr.

Perc.

Elect.

Four days a - lone, but I am not ill!

*mp* *mf* *mp* *f*

Musical score for measures 20-22. The score includes parts for Hilde, Fl., Gtr., Perc., and Elect.

- Hilde:** Lyrics: "I do not feel ill! No - bo - dy be - lieves me, but".
- Fl.:** Dynamics: *p*, *mf*. Includes triplets and slurs.
- Gtr.:** Dynamics: *p*, *mf*. Includes triplets and slurs.
- Perc.:** Includes "Brake drum" and "Kick" markings. Dynamics: *p*.
- Elect.:** Bass line with notes (b) and (f).

A circled measure number "21" is located below the Percussion staff.

44

Hilde

I am not ill!

Fl.

Ctr.

Perc.

Susp. Cymbal

Kick

Triangle

Elect.

22

48

Hilde

Fl.

Ctr.

Perc.

Elect.

Tell your story to your self.

Low tom

(f5)



60

Hilde school talk - ing to some friends. I

Fl.

Gtr. *f* *p* *f sub. p*

Perc.

Elect.



63 *mf*

Hilde froze with a word half in, and half out of my

Fl. *mp* *p*

Gtr. *f* *p*

Perc.

Elect.



66

Hilde mouth.

Fl. *mf* *p*

Gtr.

Perc.

Elect.

68

Hilde

When I came to,

Fl.

*mf*

Gtr.

*f*

Perc.

*mf*

Elect.



70

Hilde

I saw the world with ev' - ry - thing in place,

Fl.

*p*

Gtr.

*p*

Perc.

Elect.



72

Hilde

but with eve - ry hu - man bo - dy gone.

Fl.

*mf*

*p*

*f*

Gtr.

*mp*

*mf*

*f*

Perc.

*f*

Kick

Elect.

76 [hold here a beat] ♩ = 96

Hilde

Fl.

Gtr.

Perc.

Elect.

23

15<sup>mb</sup>

79 11 *mf espress.*

Hilde

Fl.

Gtr.

Perc.

Elect.

*mp leggiero*

*mf espress.*

Brake drum (soft mallet)

*p* *mp*

(15)

82

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

(15)

86 **accel.**

Hilde as I stood on the field.

Fl.

Gtr.

Perc.

Elect.

(15)



88  $\text{♩} = 130$

Hilde they were there but I could not see them!

Fl.

Gtr.

Perc.

Elect.

(15)

93 12 ♩ = 140

Hilde

Fl.

Gtr.

*p* misterioso

[Vibraphone]

Perc.

[Kick]

*p* misterioso

Elect.

(15)

97

Hilde

Fl.

Gtr.

3 1 1

Perc.

Leo.

Elect.

(15)

101

Hilde

Fl.

Gtr.

sub. *f*

Perc.

sub. *f*

sub. *f*

*p*

[Low tom]

3 [High tom] 3

Elect.

(15)



105

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf* *poco cresc.*

Low bongo

High bongo

*ff*

(15).....

24



111

13 A tempo (♩=112)

Hilde

Picc.

Gtr.

Perc.

Elect.

*mf* birdlike

*mf* anguished

Four days,

Vibraphone

*p*

115

Hilde Hil - de. Four days here. Day two.

Picc.

Gtr.

Perc. *p secco*

Elect.

(25)



119

Hilde I was look-ing at the birds.

Picc.

Gtr.

Perc. *Vibraphone*

Elect. *Low gong (with fingers or soft mallet) p delicately*



123

Hilde I felt light head-ed for a mo ment.

Picc.

Gtr.

Perc. *Vibraphone*

Elect. *p mf p*

127

Hilde

When I looked a gain

Picc.

*f*

Gtr.

*mf* *p*

Perc.

[Low gong]

*pp* *mp*

Elect.



131

Hilde

the birds! their bod-ies were gone!

Picc.

*tr* *ff* *p* *ff*

Gtr.

*mf*

Perc.

*mf* *p*

Elect.

(26)



135

Hilde

The birds, gone.

Picc.

[Flute] *p*

Gtr.

*p* *poco cresc.* *molto legato*

Perc.

*p* *poco cresc.* *molto legato*

Elect.

14

139

Hilde

I told my mo - ther.

Fl.

*mp*

Gtr.

*mp*

Perc.

Elect.



143

Hilde

she did - n't speak at all. I could not see her..

Fl.

*p* 3

Gtr.

*p* 3 *mp*

Perc.

*mp* *mf*

Elect.



147

Hilde

I am so a - lone. But Hil - de,

Fl.

3 *p*

Gtr.

*f* *mf* l.v. l.v.

Perc.

*f* *mp*

Elect.

151 *p* **rit.**

Hilde Hil - de, there is al - so, there is

Fl.

Gtr. *p* 3

Perc. *p*

Elect.



155 *f*

Hilde al - so that glim - mer of

Fl. *mf* 3 *f*

Gtr. *mf* *pp* *f*

Perc. *mf* *p* 3

Elect. 3/4



158 **15** ♩ = 90

Hilde some - thing,

Fl. *mf* *p*

Gtr. *mf* *p* 4

Perc. *f* *p* 3

Elect. 3/4

162 **poco rit.**

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

a com - fort in the gloom...

*ppp*

*pp*

*p*

*mf*

brushed trem.



167 **16** ♩ = 110

Hilde

Fl.

Gtr.

Perc.

Elect.

**27**

15<sup>th</sup>



170

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

Low bongo

*p*

(15)

172

Hilde

Fl.

Gtr.

Perc.

Elect.

*p* sempre legato

(15)



174

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

Kick

(15)



176

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

*mf*

(15)

178

Hilde

Fl.

Gtr.

Perc.

Elect.

*f*

The

*mf*

*p*

*p* 3 3

Triangle

(15)



180

17

Hilde

Fl.

Gtr.

Perc.

Elect.

third day, — Hil de,

*p*

*mf*

3

(15)



182

Hilde

Fl.

Gtr.

Perc.

Elect.

I was sit - ting out - side.

*p*

3 3

(15)



184

Hilde: The sun was shin - ing in the

Fl.

Gtr.

Perc.

Elect.

*mp*

*mp* *p*

(15)



186

Hilde: sky.

Fl.

Gtr.

Perc.

Elect.

*mf*

*p* 3 3

*mp*

(15)



188

Hilde: When, when,

Fl.

Gtr.

Perc.

Elect.

*p* 3

*mf*

(15)

190

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

*p*

*3*

*3*

*3*

I felt that strange

(15)



192

Hilde

Fl.

Gtr.

Perc.

Elect.

*mp*

*mf*

time - less thing,

(15)



194

Hilde

Fl.

Gtr.

Perc.

Elect.

*p*

*3*

*3*

*3*

the light changed some - how,

(15)

196

Hilde

Fl.

Gtr.

Perc.

Elect.

and then,

*mf* 3 3

*p*

*mf*

(15)



198

Hilde

Fl.

Gtr.

Perc.

Elect.

in the

*mf*

*f*

(15)



200

Hilde

Fl.

Gtr.

Perc.

Elect.

sky, where just be - fore the sun had

*mp*

CII

(15)

202 18

Hilde shone: no - thing!\_

Fl.

Gtr.

Perc.

Elect.

(15)

==

204

Hilde No - thing,

Fl.

Gtr.

Perc.

Elect.

(15)

207

Hilde just a soft kind of gray, nei - ther light nor dark,

Fl.

Gtr.

Perc.

Elect.

(15).....

*mp*

*mf*

*mp*

*p*



211

Hilde lu - mi - nous, but dim.

Fl.

Gtr.

Perc.

Elect.

28

Brake drum

*p*



215

RECIT.

Hilde I closed my eyes to spare my-self the a - gon - i - zing sight of a sun - less

Fl.

Gtr.

Perc.

Elect.

*p*

*p*

29

219 **molto rit.**

Hilde world.

Fl. *pp*

Gtr.

Perc. *p*

Elect.



221 **19 a tempo** (♩ = 110 Anxiously)

Hilde Oh, Hil - de, day four.

Fl. *p*

Gtr. *p*

Perc. *p* [Kick] *mf*

Elect. (15)



225

Hilde Yes - ter - day. Sit - ting in this room. What is there to say? Just a -

Fl. *mf*

Gtr. *mf*

Perc. *pp*

Elect. (15)

229

Hilde

no - ther fro - zen mo - ment. I felt nei - ther here nor there,

Fl.

Gtr.

Perc.

Elect.

*p* *mf*

(15)



232

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf* *p* *mf*

(15)



234 ***f* Meno mosso** ♩ = 104

Hilde

Sud-den-ly, sud-den-ly, Oh! Sud-den-ly ev-ry-thing, Oh! Sud-den-ly

Fl.

Gtr.

Perc.

Elect.

*f* *f* *f* *mp* *mp*

Low tom  
High tom  
Kick  
Brake drum

238

Hilde

ev - ry - thing was gray. ev - ry - thing was gray.

Fl.

Gtr.

Perc.

Elect.

*p*

*p*

*f*

gray/silver noise -->



242

Hilde

Fl.

Gtr.

Perc.

Elect.

*ff*

Brake drum

*f*

30

3

G. P.



246

Hilde

Fl.

Gtr.

Perc.

Elect.

*pp*

Susp. cymbal

*pp*

Triangle

*p*

20



250

*f*

Hilde

Now here I am in - side a gray kind of

Fl.

*p*

Gtr.

Perc.

*ppp* *pp*

Elect.



254

Hilde

glow, with light from eve - ry where and

Fl.

*mf* *p*

Gtr.

*p legato* *mf*

Perc.

*ppp* *mp* *pp*

Elect.



258

Hilde

no - where, it is fea - ture - less,

Fl.

Gtr.

*p*

Perc.

*mp*

Elect.

262

Hilde

form - less, with beams and shines com - ing and

Fl.

*mp*

Gtr.

*mp*

Perc.

Elect.



266

Hilde

go - ing.

Fl.

*p* *mp* *p*

Gtr.

*p*

Perc.

*p* *Susp. cymbal*

Elect.



269

Hilde

Hil - de, think of it,

Fl.

*mf*

Gtr.

Perc.

*p* *mf*

Elect.

$\text{♩} = 140$

272

Hilde

the glim - mer - ing thing,

Fl.

*mf*

Gtr.

*p poco cresc.*

Perc.

*ppp* *f*

Elect.



275

Hilde

the flick - er of light,

Fl.

*p*

Gtr.

Perc.

*pp* *mp*

Elect.



279

Hilde

grow - ing, Hil - de, how does it feel?

Fl.

*mf* *f*

Gtr.

*mf* *f*

Perc.

*pp* [Low tom]

Elect.

283 **poco accel.**

Hilde: How does it feel?

Fl.: *mf* 2 *f*

Gtr.: *mf* 2 *f*

Perc.: *ff* *p* *f* (High tom) 2

Elect.:



287 **[21]** ♩ = 110

Hilde: In -

Fl.: *subito p*

Gtr.: *f*

Perc.:

Elect.:



291

Hilde: side me some-thing lives, the es - sence of sight, in - ner,

Fl.:

Gtr.: *mf*

Perc.: *p*

Elect.:

295

Hilde

lu - mi - nous bliss. —

Though I'm lost in this gray, —

Fl.

*pp* *mp*

Gtr.

Perc.

Elect.



299

Hilde

I am found.

As I see less each day,

Fl.

*mf*

Gtr.

*f*

Perc.

*mf*

Elect.



303

Hilde

si - - - lent bells chime, —

Fl.

*p* *mf* *p*

Gtr.

*p* *mf* *p*

[Susp. cymbal]

[High Tom]

Perc.

Elect.

307

Hilde and Oh!

Fl.

Gtr.

Perc. Kick

Elect.

*p* *f*

3

8



310

Hilde and Oh!

Fl. *mp*

Gtr. *f*

Perc.

Elect.

*p* *f*

CII

3

*p* stately



313

Hilde this haze, when my

Fl. *mp*

Gtr.

Perc. *p*

Elect.

5

5

5

5

5

5

5

5

5

*p*

Freely use pitches within each segment  
do not have to play this sequence exactly

315

Hilde fear re - cedes, it is so

Fl.

Gtr.

Perc. **Kick**

Elect.



317

Hilde love - - - ly. It is in - vis - i -

Fl.

Gtr.

Perc.

Elect.

**accel.**



319

Hilde bly a - - blaze, with

Fl.

Gtr.

Perc.

Elect.

$\text{♩} = 116$

**f**

321

Hilde

Fl.

Gtr.

Perc.

Elect.

some - thing that my soul now



323

Hilde

Fl.

Gtr.

Perc.

Elect.

needs.



325 22

Hilde

Fl.

Gtr.

Perc.

Elect.

*f* *p* *f* *sempre* *mf* *p*

Vibraphone

*f*



329

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.



332

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.



335

rit.

a tempo

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

(31)  
 8<sup>vb</sup>  
 mf

338

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

*p*  
*p*  
*p*

(8).....|



341

rit. ....

a tempo

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

*f*  
*f*  
*f*

32

(32)

15<sup>th</sup>.....

344

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

*ff* *p*  
*p*  
*ff*

(15).....|

347 rit. . . . .

Hilde

Fl.

Gtr.

Perc.

Elect.

350 a tempo

Hilde

Fl.

Gtr.

Perc.

Elect.

33

15<sup>mb</sup>

352 rit. . . . .

Hilde

Fl.

Gtr.

Perc.

Elect.

(15)

354 **23** ♩ = 50 **Essential, Pure** (Hilde begins to sway, dance, getting lifted up by the invisible brilliance)

Hilde  
 Fl.  
 Gtr.  
 Perc. Crotales  
 Elect.



358

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.



362

Hilde  
 Fl.  
 Gtr.  
 Perc.  
 Elect.

366

Hilde

mov - ing in space, \_\_\_\_\_ is black, it's

Fl.

*p poco cresc.*

Gtr.

*p poco cresc.*

Perc.

*p poco cresc.*

Elect.



370

Hilde

gone, im - poss - i - ble to trace, un -

Fl.

*p*

Gtr.

*p poco cresc.*

Perc.

Elect.



373 **accel.**

Hilde

less a thing in - ter - sects its long, \_\_\_\_\_ long

Fl.

Gtr.

Perc.

Elect.

377 -

Hilde line. And then it will be that thing, and

Fl.

Gtr. *mf*

Perc.

Elect.



381 - . = 66 Inspired

Hilde not the fly - ing ray that will app - ear, as if to

Fl.

Gtr.

Perc.

Elect.



385

Hilde say light is and is not here.

Fl.

Gtr.

Perc. *f* [Susp. cymbal] *p*

Elect.

388 **24** a tempo (♩. = 50 Powerful)

Hilde: And I, oh I, Hil - de!

Fl.: *f*

Ctr.: *f*

Perc.: *ff* (Vibraphone), *ff* (Kick drum)

Elect.: *ff*



391

Hilde

I, oh, I am that thing! Em -

Fl.

4

Gtr.

l.v. 4

p

Perc.

Elect.



394

Hilde  
braced, co - cooned in an imm - ense\_\_\_\_\_ glim - mer ing.\_\_\_\_\_

Fl.  
\_\_\_\_\_

Gtr.  
\_\_\_\_\_

Perc.  
\_\_\_\_\_

Elect.  
\_\_\_\_\_







Elect.

415

Hilde *mf* I, oh I!

Fl. *mf* I, oh I,

Gtr. *mf* ⑥

Perc. *mf*

Elect.



418

Hilde I am that thing.

Fl. *mp*

Gtr. *mp*

Perc.

Elect.



421

Hilde I am that thing! I am that thing!

Fl. *p*

Gtr. *pp*

Perc. *mf* (35)

Elect. *15mb*

424 (A Caretaker enters and startles Hilde, shattering the moment.) (The Caretaker does not answer. He leaves and Hilde goes to sleep.)

Hilde I am that thing. Oh! Who's there?

Fl. [To Picc.]

Gtr.

Perc. [Brake drum] *fff*

Elect.

(f5).....

36

### Scene 3

(Night. The Caretaker returns to the stage and and muses to himself about Hilde's situation. Meanwhile, as she sleeps, Hilde sings wordless music.)

1  $\text{♩} = 304$  ( $\text{♩} = 152$ ) Clocklike

Hilde

Piccolo *pp* *f* *p*

Guitar

Vibraphone

Electronics

26 *mf*

11 Hilde *mf*

Picc. *mf*

Gtr.

Perc.

Elect.

21 *f*

Hilde

Picc.

Gtr. *f*

Perc. *mf* (High tom) (Low tom)

Elect.



31 27

Hilde

I am well! I am well! I, I am well\_\_\_\_\_

Picc.

Gtr. *f*

Perc.

Elect.



41

Hilde

I am well! I am well! I, I am well\_\_\_\_\_

Picc.

Gtr.

Perc.

Elect. (37)

51 28

Hilde *I am well! I am well! I, I am well\_\_\_\_\_*

Picc.

Gtr. *cresc.*

Perc. *cresc.*

Elect.



61

Hilde

Picc.

Gtr.

Perc.

Elect. 38



(Night / Visitation. Hilde wakes up, the Caretaker exits. A dimly visible body emerges on stage. Hilde can feel it but cannot see it. The stage is nearly entirely dark. After a few moments the LIGHT BODY (flute player) enters the stage left loop.)

62 29 ♩ = 112 **Intimate**

Hilde

Alto Flute

Guitar *pp hushed* *sempre*

Crotales

Electronics **4**  
**4**

66 *Light Body enters*

Hilde

A. Fl.

Gtr. *p* *pp* [Vibraphone] [Bowed]

Crot. *p* *p*

Elect.



70 *p dolce*

Hilde  
What what is this in the lu - mi - nous

A. Fl.

Gtr.

Perc.

Elect.



74

Hilde  
gray?

A. Fl.

Gtr. *p* 1 2

Perc. [Crotales] *p*

Elect.

39

78

Hilde

A. Fl.

Gtr.

Perc. *V* [Vibraphone]

Elect.

I feel some - thing, like a

*pp*



82

Hilde

A. Fl.

Gtr.

Perc.

Elect.

mind com - mun - i - cat - ing.

*p*

*pp*

(40)



85

30

Hilde

A. Fl.

Gtr.

Perc.

Elect.

*p* meditative

*mf*

*pp*

(41)

86

Hilde

A. Fl.

Gtr.

Perc.

Elect.

I can



90

Hilde

A. Fl.

Gtr.

Perc.

Elect.

read this field its part - i - cles trans - ferred, its mean - ing re -



94

Hilde

A. Fl.

Gtr.

Perc.

Elect.

vealed, as if I am hear - ing an un - spo - ken word.

*mp*

*p*

Vibraphone

42



98 **31**

Hilde

A. Fl.

Gtr.

Perc.

Elect.

*p* *mf secco* *p* 3



99 **Molto Rubato**

Hilde

A. Fl.

Gtr.

Perc.

Elect.

I must make a choice

*p misterioso pp* *p = fib. p*

*mf* 3

*mf* 3

Crotales

*pp*



102 **32**

Hilde

A. Fl.

Gtr.

Crot.

Elect.

Ah, I see \_\_\_\_\_ to - mor - row if I leave this

*p*

Vibraphone

*p*

105

Hilde

room\_\_\_\_\_ I will re - gain my vis - ion

A. Fl.

Gtr.

*mf*

Perc.

*mf*

Elect.



108

Hilde

A. Fl.

*p* *articulate and irregular* *smoother* *mf* *pp*

Gtr.

Elect.



109

Hilde

Ah, but wait, there will be a cost,

A. Fl.

Gtr.

*p*

Perc.

High wood plank with chopstick

43 44 *p*

Elect.

113

Hilde *be-cause for the sight that I re - gain, this new con - ec - tion will be lost*

A. Fl.

Gtr. *mp* *mf*

Perc.

Elect.



117

Hilde *and all light will be mun dane.*

A. Fl.

Gtr. *p* *mf* *p*

Perc.

Elect.



121

Hilde *Oh this is not so ea - sy it is a cru - el kind of choice. I can*

A. Fl.

Gtr. *pp*

Perc.

Elect.

125

Hilde

leave this room to - mor - row and re - sume my life\_\_ or

A. Fl.

Gtr.

Perc.

Brake drum

High wood block

*pp* *p* *pp*

Elect.



129

Hilde

what stay in this lim - bo? I can hard - ly see\_\_

A. Fl.

Gtr.

*p*

Perc.

Elect.



133

Hilde

if I stay this way what will I do How will I ex - ist?

A. Fl.

Gtr.

*mf*

Perc.

Brake drum

*pp* *p* *pp*

Elect.

137

Hilde

and I do want to see col-ors a - gain and the sky\_\_\_\_\_ and

A. Fl.

Gtr.

*mp*

Perc.

Break drum

*pp* *p* *pp*

Elect.



141

Hilde

land\_\_\_\_\_ and the sun\_\_\_\_\_ wo-men and men.\_\_\_\_\_ My own

A. Fl.

Gtr.

Perc.

Elect.



145

Hilde

hand

A. Fl.

Gtr.

*mf* *mp* *p*

Elect.

45

149 **33**

Hilde

A. Fl.

Gtr.

Elect.

*f* *sub. p*

4/4



150

Hilde

A. Fl.

Gtr.

Perc.

Elect.

*f* *mf* *pp*

Ah, I un-der stand there is still more

4/4



154

Hilde

A. Fl.

Gtr.

Perc.

Elect.

*p* *pp* *p* *pp*

if I chooseto stay there will be a fin - al

Brake drum

158 **rit.**

Hilde change. light-less eyes for good, no go-ing back. Hil - de Hil - de.

Fl.

Gtr. *mp* *mf*

Perc.

Elect.



(As the Light Body leaves the stage, Hilde gets back in bed and falls asleep.)

162

Hilde for - e - ver a girl un - der a hood

Fl.

Gtr.

Perc. Brake drum *pp* *p* *pp*

Elect.



## Scene 4

(Hilde sleeps)

**♩ = 151 Majestic, Vast**

1 **34**

Hilde

Flute

Guitar

Electronics **46**

9

Hilde

Fl.

Gtr.

Elect.

This system contains measures 9 through 16. The Hilde, Fl., and Gtr. parts are silent, indicated by whole rests. The Elect. part features a continuous bass line in the bass clef, consisting of eighth notes with ties between measures.



17

Hilde

Fl.

Gtr.

Elect.

This system contains measures 17 through 24. Hilde, Fl., and Gtr. remain silent with whole rests. The Elect. part introduces a melodic line in the treble clef, starting in measure 17 and continuing through measure 24, while maintaining the same bass line pattern.



25

Hilde

Fl.

Gtr.

Elect.

This system contains measures 25 through 32. Hilde, Fl., and Gtr. remain silent with whole rests. The Elect. part continues the melodic line in the treble clef and the bass line in the bass clef from the previous system.



33

Hilde

Fl.

Gtr.

Elect.



41 35

Hilde

Fl.

Gtr.

Perc.

Elect.

*mp*

sul pont.

⑥ VIII

⑤

*mp*

[Low gong]

3

3

3

3

*f*

lift and wrap A string over low E at 8th fret  
unmeasured trem. with RH nails as fast as possible

45

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

*f* *p*

⑥  
X  
⑤

High gong

3

3

3

3



49

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

⑥  
XII  
⑤

Low gong

3

3

3

3

53

Hilde

Fl.

Gtr.

Perc.

Elect.

Susp. cymbal  
fast circular motions  
with fingernails or light stick

*p*



57 **36**

Hilde

Fl.

Gtr.

Perc.

Elect.

High gong

*f*

*mf*

3

3

3

61

Hilde

Fl.

Gtr.

Perc.

Elect.



65

Hilde

Fl.

Gtr.

Perc.

Elect.

Hum + play

*f* secco

sul pont.

⑥ VIII

⑤

[Low gong]

*f*

69

Hilde

Fl.

Gtr.

Perc.

Elect.

Detailed description: This system contains measures 69 through 72. Hilde has whole rests. The Flute, Guitar, and Percussion parts feature triplet patterns. The Electric guitar part consists of sustained chords in both hands, with some melodic movement in the right hand.



73

Hilde

Fl.

Gtr.

Elect.

Detailed description: This system contains measures 73 through 76. Hilde, Flute, and Guitar are silent. The Electric guitar part continues with sustained chords in both hands, maintaining a harmonic texture.

81

Hilde

Fl.

Gtr.

Elect.



88

Hilde

Fl.

Gtr.

Elect.

95 **37**

Hilde

Fl.

*f secco*

sul pont.

Gtr.

*f*

Perc.

High gong

*f*

Elect.



99

Hilde

Fl.

Gtr.

Perc.

Elect.

107 **38**

Hilde

Fl.

*f* *secco*

sul pont.

Gtr.

*f*

⑥ XII

Perc.

[Low gong]

*f*

Elect.



111

Hilde

Fl.

*mf* *secco*

sul pont.

Gtr.

*mf*

⑥ VIII

Perc.

[High gong]

*mf*

Elect.



119

Hilde

Fl.

Gtr.

Perc.

Elect.

25

Detailed description: This musical system covers measures 119 to 122. Hilde's part consists of whole rests. The Flute, Guitar, and Percussion parts feature a rhythmic pattern of eighth-note triplets. The Electric guitar part is silent in measure 119 and begins in measure 120 with a melodic line of eighth notes, which is marked with a circled '25'. The bass line consists of a continuous eighth-note triplet pattern across all measures.



123

Hilde

Fl.

Gtr.

Perc.

Elect.

Detailed description: This musical system covers measures 123 to 130. Hilde, Flute, Guitar, and Percussion are all silent. The Electric guitar part continues its melodic line from the previous system, consisting of eighth notes with ties across the measures. The bass line continues with the eighth-note triplet pattern.

131 **39**

Hilde

Fl.

Gtr.

Perc.

Elect.



139

Hilde

Fl.

Gtr.

Perc.

Elect.

147 *ppp*

Hilde

Fl.

Gtr.

Perc.

Elect.

(47)



## Scene 5

(Morning. Hilde is awakened and must make her choice.)

1 40 ♩ = 92 Tense

Hilde

Flute

Guitar

Percussion

Electronics

(48)

Low bongo

f 3

f

f

f

3



5

Hilde

Fl.

Gtr.

Perc.

Elect.

High tom

Kick

f

3

1

3

3

3

9

Hilde

Fl.

Gtr.

Perc.

Elect.

13

(Hold - Caretaker walks on stage) 41

(To the Caretaker)

Hilde

Fl.

Gtr.

Perc.

Elect.

Who's there? \_\_\_\_

ff

p

f

ff

p

ff

Floor Tom (Stage)

17

Hilde

Fl.

Gtr.

Perc.

Elect.

Chanted

mp

Your fam - ly wants to see you

Come out of this room for a few min-utes.

Chanted

mp

Your fam - ly wants to see you

Come out of this room for a few min-utes.

Chanted

mp

Your fam - ly wants to see you

Come out of this room for a few min-utes.

f

21 *(Aside, to herself)*

Hilde

Fl. *che*

Gtr.

Perc.

Elect.

Ah, so here it is, — the time to choose.

*f* *p* *mf*

Piccolo



25 *(To caretaker, stalling for time)* 42

Hilde

Picc.

Gtr.

Perc.

Elect.

Wait, why?

Hil - de

*p* *mf* *f* *mf*

We are con-cerned. Your

29

Hilde

Picc.

moth - er is heart - bro - ken. Your fa ther has hard - ly spo - ken since Wen's - day. Eve - ry - one is

Gtr.

moth - er is heart - bro - ken. Your fa ther has hard - ly spo - ken since Wen's - day. Eve - ry - one is

Perc.

Elect.

Flute

CIV



33

43

Hilde

Hil - de Hil - de Hil - de

Fl.

*mp rippling* *mf*

hop - ing you will get bet - ter. Hil - de Hil - de Hil - de

Gtr.

hop - ing you will get bet - ter. Hil - de Hil - de Hil - de

Perc.

Elect.

(Hilde sings an aside to herself, while the Caretakers repeat their invitation.)

36

Hilde

Fl.

Gtr.

Perc.

Elect.

49

50



39

Hilde

Fl.

Gtr.

Perc.

Elect.

*f* (♩ = ♩) Uncertain

Bright, whis-per-ing

*p* *mf*

Stage crash scrape

*mf*



42

Hilde

Fl.

Gtr.

Perc.

Elect.

tra - ces, can I leave you?

*mf* Hil - de

*mf* Hil - de

*mf* Hil - de

Stage tom

*mf*

45

Hilde

Brill - iant, shim-mer - ing chan - nel, I am temp - ted.

Fl.

Gtr.

Perc.

Elect.



48

Hilde

Pure, flick - er - ing whisp - ers,

Fl.

Gtr.

Perc.

Elect.



51

Hilde

I am fright - ened. I am

Hil - de

Fl.

Hil - de

Gtr.

Hil - de

Perc.

Elect.

*mf*

*mf*

*mf*

*mf*

5/8 2/4 7/8 3/4



54

Hilde

fright - ened.

Fl.

Gtr.

Perc.

Elect.

*f*

*f*

3/4 5/8 2/4 7/8

57 **44**

Hilde

Fl. *mf plaintive*

Gtr.

Perc.

Elect.



60

Hilde  
Glow - - ing pat - terns,

Fl. *ff*

Gtr. *mp* *mf* *mf* CX

Perc. *mp* *mf* *p* *f* *p*

Elect.

(52)

63

Hilde I might not miss you. Light,

Fl.

Gtr.

Perc.

Elect.

53

*p* *f* *p*



66

Hilde light, light, I might for - get you.

Fl.

Gtr.

Perc.

Elect.

*p* *f* *p* *mf*



69 ♩ = 88 Resolute

Hilde

Fl.

Gtr.

Perc.

Elect.

*pp* *ff* *pp*

71 **45**

Hilde *mf* Or-di-na-ry life a-gain, see-ing and do-ing. I have

Fl. *mf* *p*

Gtr. pizz. bass *mf* *p*

Perc. *mf*

Elect.



75

Hilde *mf* bare-ly be gun. to live. I hard-ly know\_ what I want.

Fl. *mf* *f*

Gtr. *mf* *f*

Perc. *mf* *f*

Elect.



79

Hilde *mp* How can I sac-ri-fice my self?

Fl. *mp*

Gtr. senza pizz. *mp* *pp*

Perc. *mp* *pp*

Elect.

83

Hilde

How can I give up my life be-fore it has be- gun? No,

Fl.

*mp*

Gtr.

*mf*

Perc.

*mf*

Elect.



87

Hilde

com - mon sense Hil - de, and reas'-na-ble fear de - mand that this mir - a - cle be un -

Fl.

*mf*

Gtr.

*mf*

Perc.

Elect.



91

Hilde

done.

Fl.

*p*

Gtr.

*f*

*p legato*

Perc.

Elect.

$\text{♩} = 58$  Uncertain ( $\text{♩} = \text{♩}$ )

46

95

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

*mp*

But

54



99

Hilde

Fl.

Gtr.

Perc.

Elect.

wait,

e - ven to say these words en route to a de - ci - sion,

4

4

4

1 3 2 1 4



103

Hilde

Fl.

Gtr.

Perc.

Elect.

weighs my spi - rit down and makes an in - ci - sion

4

4

1 2 0 4 3

107

Hilde

be - tween the thrill of this thing, how - e - ver sca - ry,

Fl.

*mp* *mf* *p* *mf*

Gtr.

Perc.

Elect.



111

**Rubato**

Hilde

and some deep in - nate will I must not bu - ry in mere com - fort or

Fl.

Gtr.

*mf cresc.*

Perc.

*cresc.* 4

Elect.



115

Hilde

safe - ty, how e - ver much I de - sire it.\_\_\_\_\_

Fl.

Gtr.

Perc.

*f*

[Stage tom] *p* *f* *p*

[Stage crash cymbal]

Elect.

119 **47** ♩ = 42 Accepting, Powerful

Hilde

Fl.

*f* *mf* *f* *ff*

*extend across beats, push and pull freely*

Gtr.

*f sempre molto rubato* *simile*

Perc.

*f* *mf* *f* *mf*

Elect.

122

Hilde

Fl.

*mf* *f*

Gtr.

*l.v.* *ff*

Perc.

*simile*

Elect.

**48** *f* **Meno mosso** (♩ = 38)

Hilde

Fl.

*mf* *f*

Gtr.

*f* *ff* *mp* *ff*

Perc.

*mp*

Elect.

E - ven if it means I lose it





137

Hilde Oh! My joy!

Fl.

Gtr.

Perc. *Stage crash* *p* *f*

Elect.



140

Hilde My dark - ly shin - ing joy! My

Fl. *f* *mf* *f* *mf*

Gtr. *simile* *II*

Perc. *simile* *3* *3* *3* *3*

Elect.



143

Hilde joy will sur - vive if my eyes

Fl. *f* *3* *3* *3*

Gtr. *IV* *CI*

Perc. *3* *3* *3* *3*

Elect.

146

Hilde stay dim. Light, light,

Fl. [Piccolo]

Gtr. CIII CIV

Perc. 3

Elect.



149

Hilde light!

Picc. CIII

Gtr.

Perc. p

Elect.



152 49 (♩ = 174)

(Hilde thinking, she is finding her courage and coming to a decision)

Hilde

Picc. p

Gtr. p

Perc. mf

Elect. mf

Hil - de

Hil - de

Hil - de [Stage tom]

156

Hilde

Picc.

Gtr.

Perc.

Elect.

*p*

*f*

Hil - de

Hil - de

Hil - de



160 (♩ = ♩)

Hilde

Picc.

Gtr.

Perc.

Elect.

*p*

IX

165 **50**

Hilde Oh! Oh!

Picc. *mf* *f*

Gtr. *mf* *f*

Perc. *mf* [Stage tom] *f* *p* [Stage crash]

Elect. 6



169

Hilde Yes! Yes! I am de - ci - ded! Oh,

Picc. *mf*

Gtr. 0 2 2 4 CI 4 3

Perc. *f*

Elect. 55 8<sup>th</sup>



173

Hilde it feels right! I will take this beam and ride it!

Picc.

Gtr.

Perc.

Elect. 8

177

Hilde

Re - main in light.

Picc.

Gtr.

Perc.

Elect.

(8).....



180 **51** = 92 Very Tense (To Caretakers)

Hilde

Wait, I can - not leave yet. Tell ev - ry - one

Fl.

mf

Gtr.

Perc.

Stage tom

56

Elect.

mf



184

Hilde

I am too tired. I will talk to them to - mor - row.

Fl.

Gtr.

Perc.

Elect.

188 (Caretakers, to themselves)

(Caretakers, to Hilde)

Hilde  
 Caretakers - to themselves  
*mf*  
 We can - not wait a - ny long - er, we need to in - ter - vene. Just stay  
 To Hilde

Fl.  
 Caretakers - to themselves  
*mf*  
 We can - not wait a - ny long - er, we need to in - ter - vene. Just stay  
 To Hilde

Gtr.  
 Caretakers - to themselves  
*mf*  
 We can - not wait a - ny long - er, we need to in - ter - vene. Just stay  
 To Hilde

Perc.  
 Tambourine  
*pp*  
 57  
*f*  
*pp*

Elect.



(Hilde cannot see them. She struggles, increasingly panicked)

Hilde  
 calm, ev - ry - one is wait - ing, you must come with us now.

Fl.  
 calm, ev - ry - one is wait - ing, you must come with us now.

Gtr.  
 calm, VI  
*mf*  
 ev - ry - one is wait - ing, you must come with us now.

Perc.  
 calm, ev - ry - one is wait - ing, you must come with us now.

Elect.

194 52

Hilde *ff* No! Stop!\_\_\_\_\_

It will on - ly be for a lit - tle while. Hil - de *f* To Picc. Hil - de

Fl. *f* 3 Hil - de *f* Hil - de

Gtr. CII CIII *mf cresc.* CV Hil - de *f* Hil - de

Perc. Stage tom Tambourine *mf cresc.*

Elect.

197

Hilde I need to stay here! You do not un - der - stand, I can-not leave!

Hil - de *f* Hil - de Hil - de

Fl. Hil - de *f* Hil - de Hil - de

Gtr. IX *f* Hil - de *f* Hil - de

Perc. Hil - de *f* Hil - de Hil - de

Elect.



200 *(Hilde continues to struggle as the Caretakers try to subdue her)*

Hilde

No!\_\_ No!\_\_ Stop!\_\_ I have de - ci - ded!\_\_ You

Hil - de Hil - de Hil - de Hil - de

Picc.

Hil - de Hil - de Hil - de Hil - de

Gtr.

Hil - de Hil - de Hil - de Hil - de

Perc.

Elect.



203 *f cresc.*

Hilde

do not un-der-stand! I can-not leave! Stop! I have, I,\_\_\_\_\_

Hil-de Hil-de Hil-de

Picc.

*p* *ff*

Hil-de Hil-de Hil-de Hil-de

Gtr.

*fff* *f cresc.*

Hil-de Hil-de Hil-de Hil-de

Perc.

*f*

CPU

206 **53**

Hilde

I, \_\_\_\_\_

*mf cresc.* *cresc.* *ff*

Hil - de Hil - de Hil - de Hil - de Hil - de

Picc.

*cresc.* *f*

Hil de Hil - de Hil - de Hil - de Hil - de Hil - de

Gtr.

*ff* *ff* *3*

Hil - de Hil - de Hil - de Hil - de Hil - de

Perc.

*p* *ff* *p* *p* *ff* *p* *f*

Stage crash

CPU



209

Hilde

I, \_\_\_\_\_ Stop! \_\_\_\_\_ I, \_\_\_\_\_ I have

Hil - de Hil - de Hil - de Hil - de Hil - de

Picc.

*ff*

Hil - de Hil - de Hil - de Hil - de

Gtr.

*ff* *p* *ff*

Hil - de Hil - de Hil - de Hil - de

Perc.

*p* *f* *f* *ff*

CPU

(in the middle of the word "chosen," Hilde freezes. It is shocking and very clear that she is in the grip of something real and powerful. The Caretakers fall back, terrified and amazed.)

54 211 **ff** ♩ = 100

Hilde

CHO - - - - -

Picc.

Gtr.

Perc.

Elect.

58 59

15<sup>ms</sup>



215

Hilde

Picc.

Gtr.

Perc.

Elect.

*p* *p* *p*

(15)



219

Hilde

Picc.

Gtr.

Perc.

Elect.

223

[sung]

sen!

60

Hilde

Picc.

Gtr.

Perc.

Elect.



$\text{♩} = 130$  **Hushed, Revelatory** *(Morning. Gradually, a light emerges. Hilde sings about her new reality.)*

55

Hilde

Piccolo

Guitar

Perc. *Crotales* *p*

Electronics  $\frac{5}{8}$



230

Hilde

Picc.

Gtr.

Perc.

Elect.

234

Hilde

Picc.

Gtr.

Perc.

Elect.

*pp*



238

Hilde

Picc.

Gtr.

Perc.

Elect.

*f*

62



240

56

Hilde

Picc.

Gtr.

Perc.

Elect.

*mf* joyous

Ah

*p*

*mf*

*p sempre legato*

*p*

242

Hilde I can - - not see,

Picc.

Gtr. *f*

Perc.

Elect.



244

Hilde and yet,

Picc.

Gtr. *pp* *f* *sub. p*

Perc.

Elect.



246

Hilde oh,

Picc.

Gtr. *p* *f*

Perc.

Elect.

248

Hilde

where the light is, I feel!

Picc.

Gtr.

*mp* *f*

Perc.

Elect.



250

Hilde

Where I go, light pre - cedes

Picc.

*p* *p* *i* *m*

Gtr.

mute with right hand

sub. *pp*

Perc.

*mf* *secco* 12

Elect.



252

Hilde

me.

Picc.

Gtr.

nat.

Perc.

12

Elect.

254

Hilde

I know be-cause light\_ leads me.

Picc.

*p*

Gtr.

*mp* sul pont.

*mp*

Perc.

*mp*

Elect.



258

Hilde

this bed those walls are here and here

Picc.

Gtr.

CIII

Perc.

Elect.



262

Hilde

Picc.

Gtr.

*pp*

Perc.

*p*

*f*

Elect.



264 **57** parlando

Hilde: I know be-cause I feel where the light falls

Picc.: *mp* sul pont.

Gtr.: *mp*

Perc.: *mp* 12

Elect.:



267

Hilde: a voice in my in-ner ear or in my know-ing

Picc.: *mf* sul pont.

Gtr.: *mf*

Perc.: *mf* 12

Elect.:



270

Hilde: some - thing glow - ing

Picc.: *pp* *mp* *p*

Gtr.: *pp* *mp*

Perc.: *pp* 12 *mp* 12

Elect.:

273 58

Hilde *3*  
has come in-to be - ing

Picc.

Gtr. *pp*

Perc. *pp* *12*

Elect.

*ppp*



276

Hilde  
so now I see this cell

Picc. *p*

Gtr.

Perc. *p*

Elect.



279

Hilde  
per - fect - ly well\_ I know the way

Picc. *3*

Gtr. *CI*

Perc. *12* *3* *12*

Elect.

*(Hilde gestures towards a new Light Door that is slowly beginning to emerge)*

282 59

Hilde  
out

Picc.  
CIII

Gtr.

Perc.  
12

Elect.



(Hilde continues to sing as she slowly exits through the light door)

285

Hilde  
Ah

Picc.  
f mp

Gtr.

Perc.  
12

Elect.



poco accel.

288 60

Hilde  
Hil - de Hil - de Hil - de

Picc.  
f mp f mf 3 f

Gtr.

Perc.  
12

Elect.

[Crotales]

(Closing. Hilde is gone. We hear Hilde's opening narration again, fragmented but understandable, as Hilde harmonizes with it offstage)

291 **61** ♩ = 84 **Radiant**

Hilde

Picc. *ff*

Gtr.

Perc. *f* **Crotales** **Kick**

Elect. *f* **63** **64** **65** *f broadly*



298 **62**

Hilde

Fl.

Gtr.

Perc. **Kick** *mf*

Elect. **66**

I had no signs on a life ill - u - mi - na ted, but some - times,

302

Hilde

Fl.

Gtr.

Perc.

Elect.

fate or chance as- or to be e - le - va ted.\_\_\_\_

High tom

Low tom

*mf*



306 **63** (♩ = ♩) ♩ = 56 Radiant

(♩ = ♩) ♩ = 84 Radiant

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

309

Hilde

Fl.

Gtr.

Perc.

Elect.

(67)

*pp*

*mf*

Which of these two out-comes my sto - ry rep - re - sents, you peo - ple may de - cide. \_\_\_\_\_



312 (♩ = ♪) ♩ = 56 Radiant

Hilde

Fl.

Gtr.

Perc.

Elect.

*mf*

314

Hilde

Fl.

Gtr.

Perc.

Elect.

Kick



316 (♩ = ♩) ♩ = 84 **Radiant**

Hilde

Fl.

Gtr.

Perc.

Elect.

68

I well know the por-tions of good and bad that I would place on eith - er side. \_\_\_\_\_

319 **64** (♩ = ♩) ♩ = 56 **Radiant**

Hilde

Picc. **Piccolo** *f*

Gtr. *f* l.v.

Perc. *f*

Elect. **69**

I was re - made by e - vents which



321 (♩ = ♩) ♩ = 84

Hilde

Picc.

Gtr.

Perc. **Kick**

Elect. **3**

oth - ers could not acc - ept.



323 **65** **Meno mosso** ♩ = 50

Hilde

Picc.

Gtr.

Perc.

Elect.

*mf*

*mp*

*f cresc.*

*mf*

*mp*

*f cresc.*

l.v.

70

71



327

Hilde

Picc.

Gtr.

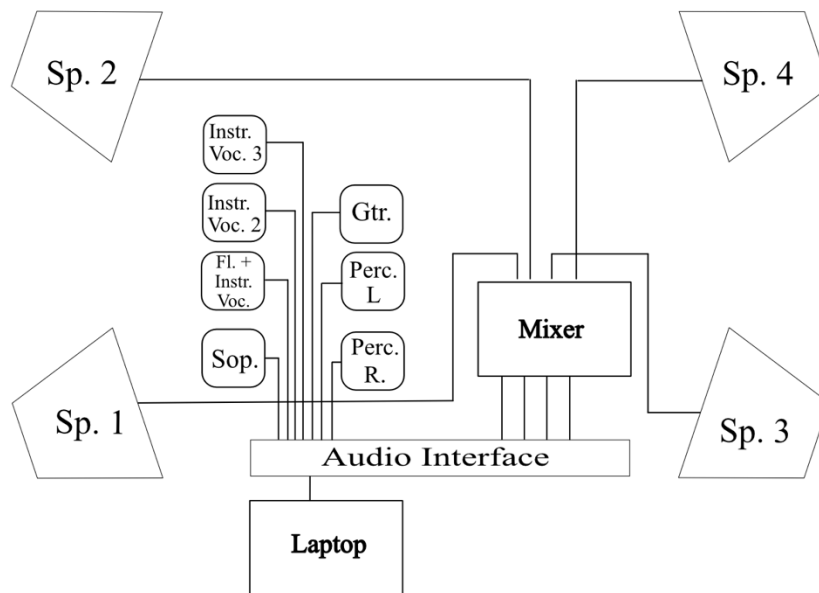
Perc.

Elect.

72

## Appendix A – Electronics Schematic

The following schematic shows the electronics setup for *In Light*, depicting all inputs to the audio interface and software, and the outputs to the mixer and the speakers. This schematic does not depict stage placement.



- The four vocal inputs (Soprano, Flute + Vocal, Instr. Voc. 2, and Instr. Voc. 3) should be head-mounted microphones with wireless transmitter packs, to allow the soprano and instrumentalists to move around while vocalizing.
- The guitar microphone should be a high-quality microphone that mounts to the guitar, with adjustable placement of the capsule.
- The percussion microphones should be Shure SM-57s or something similar. Sensitive large-diaphragm condenser microphones are likely to cause problems.
- The audio interface connects to the laptop, sending audio into the computer to be processed by the Max/MSP patch, and receiving audio from the laptop (live processing and fixed media tracks) to be sent out of the audio interface to the speakers.
- The four outputs from the audio interface send the spatialized four-channel audio image to the mixer, which sends those channels out to the four speakers in the space.
- By default, the instruments are not amplified when they are not being processed. In future productions, the use of amplification is up to the discretion of the ensemble and the requirements of the space.

## Appendix B – Notebook Scans

### B.1 - Storyboards

11-23-11

1.1

Switch? (Hilde so)

1.2

2.1

2.2

3.1

3.2

3.3

4

5.1

5.2

5.3

48

**OPENING**  
pre-recorded narration/**FRAMING**  
mysterious light, mostly dark stage  
subtle, ephemeral, almost frustrating

**DUMB SHOW**  
no narration  
1. Hilde's first freeze (possibly audible, maybe the first sound of the show)  
2. Telling her family - pantomiming her total sightlessness  
3. Being locked away

maybe we hear her laugh, then say "it's not a freeze or a stare?"

**FOUR DAYS - exposition - recit/ariso**  
Hilde explains her transformation but also gives all necessary background on her family + why this week is important → **DESIRED EVENT** (maybe Friday?)  
She also introduces the Keeper (name \_\_\_\_\_) + her pain at how he never talks to her, treats her like a patient, etc  
Hilde becomes inspired, talking about light

(very short, not really a scene)

Keeper enters, disrupts Hilde's inspiration (not sure if he just enters + leaves food, or if he actually tries to make her drink something. Maybe just entering is disruptive enough? But then I'm not sure it's really a scene (maybe that's fine)) [Question: do we need a struggle here? prob not if there was one in the dumb show]

Keeper muses about Hilde, saying "she's not right" or "she is ill" etc [is this live speech/chanting?] while Hilde sleeps + sings vocalese "light music"  
Builds to a climax where Keeper says she is ill + H wakes up, saying "I am well"

Hilde, awake, inspired, feeling confident - an aria about **TRUE LIGHT** + what it means [should this be cut or go to 5.2?] Probably

A miraculous "light body" appears - it is Hilde's own new consciousness of light. Hilde learns that she must choose between taking her ordinary future/fortune or going into the unknown with light. She learns that if she stays connected to light she will go blind (lose all sight/light). Hilde sleeps

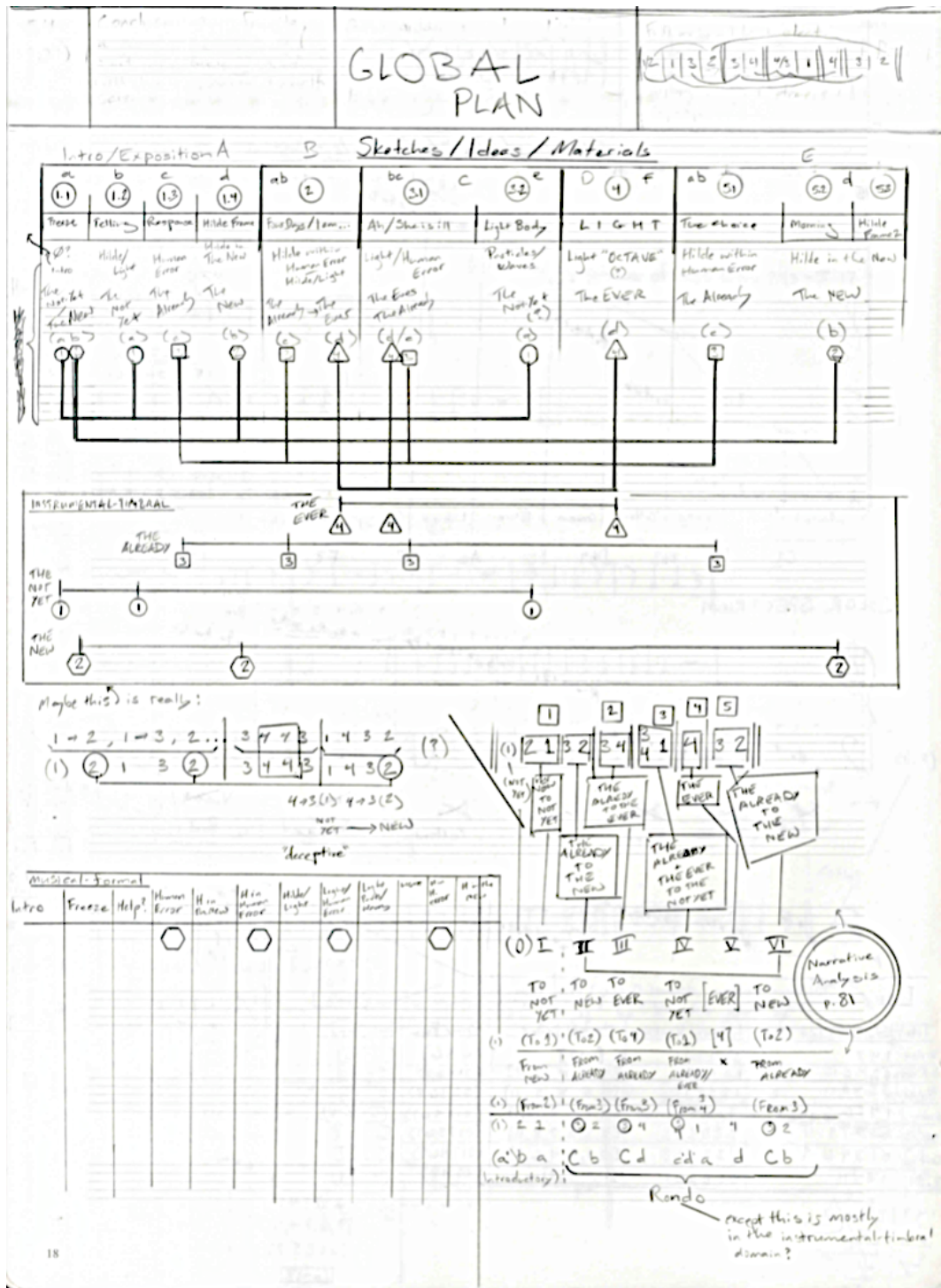
Interlude / Light solo  
Hilde sleeps...

Keeper comes, wakes H up, "time to go" H waves, tempted but wants to stay with the light, struggle - H **FREEZE** - Keeper runs away

Hilde ascended - cannot see but feels the light - becoming less than and more than human - leaves through the **LIGHT DOOR**

**CLOSING**  
Keeper enters, H is gone + light door is fading  
He clears up as we hear H's opening narration repeated but fragmented - music gradually finds silence as lights fade up to whiteout, then black

## B.2 – Global Narrative Analysis and Plan





## B.3 - Scene Worksheets

Score	Dramatic Character/Tone	Musical Qualities	Instruments/Sounds
1.1 Freeze (2:30)	Shocking, exciting, intense Unexplained  The NEW/The NOT-YET (but in shocking form)	PERCUSSIVE Disorienting Stuck, Tense Not periodic/patterned <u>STATIC</u>	- Frozen vocal note (pedal) + texture (fragments of speech?) - intense percussion - sharp attacks (flute) - very fast spiky guitar? [granulation parts/waves] etc. 

② Is this just Hilde + electronics? no ensemble yet? that must make sense, just her held note + texture, + electronic jagged interruptions of full-spectrum noise, granulation, and so on. maybe just percussion voice + electronics, then the caretakers' chorus floating through + over it.

**Sketches / Ideas / Materials**

**CARETAKERS' CHORUS**  
emerges from

May need a "pre-curtain" very short introduction - establish the elements - harmony, pitch sets, etc. Then the freeze happens + lights come up. YES

**Microsounds** - granules, glissos etc  
electronics

**Voices + Microsounds**  
Intro  
perception/attacks/noise (instruments)  
microsounds (electronics)  
along in geometric/mathematical curves, properties?  
4ths, 5ths, 2nds

**CARETAKERS**  
(canon) (rhythm)  
[pitch/harmony?]  
What's the caretakers' pitch-world?  
harmony  
I think some harmony is needed, or at least a pitch "center" (drone)  
K - pitch pipe  
T - mic on voc amplified a bit  
J - claps on vibraphone  
(vibration → softening medium → crotales?)

**The "Not Yet"**  
Flute (pitch + pa?)  
clean resonant electric guitar - a superpattern?  
Vibraphone or mic on amplified electric - unmade, not yet  
Patriotics?

**1.1.19**  
Intro - The Not Yet (ensemble/timbres) playing some core harmonic/melodic material. Brief, not loud.  
1.1 - Swelling to loud freeze (exposed for 4-10 secs - strong + long) then [electronic] harmonic moves again, not the vocal pitch + spoken/chanter caretakers' chorus with [patterned] silences/cutouts. Intermittent (also patterned) jagged thunder/lightning-like stabs/noise. From frozen voice, microsounds (curves, geometries) Ends with (bass drum) punctuation as the freeze breaks + Hilde runs offstage.

**A FROZEN MOMENT**

**1.1.19**  
use samples of thunder as sources for jagged breaks - slow, distort, granulate? → for live deck → flute hits → guitar stops  
MACRO thunder

**1.1.19 (Continued)**  
"Narrator's music" is serene, contemplative + kind of antique or "holy" sound...  
May be ok against the sustained Eb + with the electronics, but also might need to be removed/make it chanted, not too pitched.  
The tension is the key  
- Can float in/use any motives  
Hope motive is used - should the Row be in too? (maybe not)

Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
1.2 Telling people (1:30)	Tragic, unfair, pathetic  The NOT-YET (mint) (Macro+The Ever)	Plaintive, minimal (contrasting with 1.1)  Melody or fragments of melody  Small, fragile  Contracting Distance(?)	Solo flute + caretakers' choir acoustic guitar  [slight LIGHT-ening] on the acoustic instruments (the sense of rays, particles, waves - T/L/S)

HILDE/LIGHT

Metas(s) SUPERPOSED

M1 Hilde Music  
M2 Caretakers → sprechstimme  
(diverging (they don't understand Hilde))

acoustic guitar elements (single notes, dyads, microtones)

growing from 1.1 elect figures  
mid electric?

[electronics - sustaining motif/pattern process]  
[BACH tools?]

Gtr takes electric →

Rec 2358  
cosmetic acoustic gtr idea

10-27-18

Sketches / Ideas / Materials

subset of harmony/pitch construction?

Harmony  
The NOT YET  
Melody / MOTIVES  
(Pentatonics (?))  
Hilde Leitmotif (?)

OPEN  
SPACIOUS

→ Microsounds continue

1.2 Out of the silence after the freeze, acoustic guitar notes, balanced, elemental, pure, taken up into patterns and echoes, diffusion (SPAT) - an inaudible superpattern or hypermeter. Flute plays Hilde's leitmotif, it's sparsely. No drones, ~~the~~ microsounds. Caretakers' chorus continues (gtr exempted at first, flute exempted as necessary). Caretakers' in different meter from guitar patterns/flute.  
Percussion maybe plays some pitch pipe. Sings 1.1.2

Rec 2358

117.19 (Draft Eval)

expanding / geometric guitar figure  
(the NOT YET) opening

- ansr. voes 4ths etc - chant-like

- mixing framing harmonies  
hook/syntax not yet defined

- electronics need to hit at the EVER  
(geometry, superpattern, MACRO)

- NOT YET harmonies??  
(not sure which are which yet)

used Hope motive → Hilde's  
about the ROW!





Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
1.4 Hilde's narration framing (1:30)	Foreshadowing <u>The NEW</u> True Macro	Dazzling, Luminous, Suddenly clarified, in tune (with itself). Harmonic	Suddenly filtered noise - Rainbow out of white noise Flute Acoustic Guitar Vibraphone (CHIMES?) RAINBOWING / HARMONIES

Just intonation electronic sound object/chord (?)

↳ full spectrum harmony (scientific revelation)  
intense, tentative attacks  
retelling freeze  
rhythms but now in proportion  
something in balance  
like pulsing packets of photons etc

White noise cresc.

Filtered Bands  
Perfect Chord

→ This chord in BELLS, Super-rhythm

HILDE narration

Sketches / Ideas / Materials

(Forbidden planet new example)

Rec 2342

$\frac{82}{80}$   
b0 (b0)  
b0

$\frac{90}{80}$   
0 (90)  
0  
 $\frac{82}{80}$   
b0

$\frac{9-5}{(012367)}$  +  $\frac{3-5}{(014)}$

(not including resolution pitches in parenthesis)

HILDE IN THE NEW

\* Elemental Pattern Super-rhythm  
Balance

"Bells" of Light

\* CHORDS

becoming (subtle) motoric (for "four days")

12.27.18

1.4 Sudden emptiness, filtered noise into RADIANT HARMONY. The light rhythm (Hil) played as glorious chiming bells/chords of sound. Harmonizing Hilde's leitmotif, possibly. Hilde's narration, sung (pre-recorded) - mostly a warm red pedal tone type of sound. The entire ensemble coordinated in a total pattern/unfolding. Guitar & flute have some idiomatic solo lines in here between the chiming, connecting, flying. Out of last harmony's decay, a motoric pattern emerges on <sup>(in answer)</sup> ~~space/toms~~ - hollow, soft, empty, not loud (in landscape effect?)

1.2.19

Rhythm

Hilde's melodic (rhythmic) theme

Prime

Bells

Rec 2371

1.12.19

Dr. Strangelove - vocal modes - technical, leaps, wide range, acc. ref. to H. motive but not nec. in key spots (?). Inv. of H. motive used lx.

harmony - mixed "framing" harmonies (the high voices are not above vocal line I don't think (?). Not clearly defining using any particular syntax.

motive 5 - H "hope motive" used in accomp.

ends with RHW - ok? [loss of control - row is ambiguous - loss of control, closing, but also opportunity (?)] (ALREADY)

(already)



Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
2 Four Days / Light (10:00)	Expository <b>Disease</b> / Multifaceted - Troubled / Fringe / Fatal - Expansive / Eternal / Wondrous The <b>NOT</b> / <b>the</b> Light / The Ever / The Already	Four days = motoric but must start quietly = music must hold / drive the narrative light music = expansive, geometric family/people - cloudy, unclear ends with a kind of dance	Brake drum = electronics Flute (Hilke's leitmotif?) Intermittent guitar harmonies

## HUMAN ERROR + LIGHT

12.29.18

## Sketches / Ideas / Materials

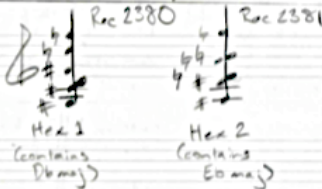
motoric but not overly intense ostinato/rhythm (related to the Already motive) - this pushes the Four Days sections. The music flows forward as Hilke describes her situation, with breaks for her commentary/announcements of light. In Four Days, pass is tons, open space, brake drums, maybe one harmonized low note on vibraphone = ominous, tyrannical, inexorable. Sharp distorted electric guitar (preamp dist.) alternating with cage-motive clean guitar. Maybe alto flute here, also motoric (?). In sections about light, radiant harmony emerges but in mixed EVER / Not yet timbres (pitch pipes etc). Vocal mode moving from technical to lyrical. Guitar harmonies mostly outlining the Already-world. Sharp percussion (brake drum, wood block, snare/toms) cuts off the Ever sections + ends the scene, going into 3.1 as more pronounced rhythmic music. Interruption rhythms foreshadow 3.1.

4 Days → Brake Drums → landscape  
Already → Guitar - Already motive / harmonies

Light → Flute

The EVER

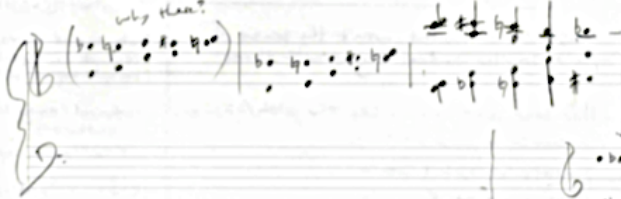
This scene notes out the true nature of the Already by having it give way to the EVER, temporarily.



CAGE motive  
ROW / Row harmonies / tight voicings  
CLOSING motive

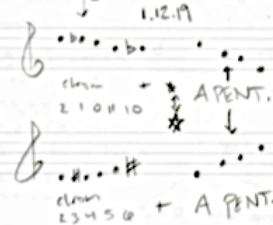
63421 and

why Hex?



JORDAN IS THE  
CARETAKER

Rec 2388



11.2.19 Draft (eval)

Four Days = low, linear, dark lyrical (!)  
Whole tone lines for opening / light (!) maybe fl +  
should be pentatonic + E♭ Di maj from  
CAGE = Row? → the light in the darkness

- Timbres used for sour/nerbic quality locally  
- H motive used, but not here, in exact key space?  
- Exposition = recit-type style (consistently used as just  
for Day 2?)

- Technical/Dramatic (more leaps, more angular) for  
emotional outbursts

- WOZZECK "BLUT" motive - not being believed \*  
only used in TRICK

- Row (mb)ing of ... ?

- OH = ecstatic, not sure why but it felt like it

- end phrases w/ rising 1/2 step  
- Row motive 6218

Light actors

Scene	Dramatic Character	Musical Qualities	Instrumentation
3.1 Hildebrand, Caretakers (4:00)	Defining, explaining (difference between H + her family, between the not-yet + the already) Tragic/unfair - H at the mercy of those who don't understand Intensification - of conflict/obstacle	Process - gradual (coalescing, converging, clashing) Multiple/DOUBLE Polytonal, polymetric BUILDING(↑)	Vocalise (+ electronic/textural?) Caretakers chorus (always multiple) Band - 1 (prob. - percussion) Pitch pipes? (why?)

## LIGHT/HUMAN ERROR

## Sketches/Ideas/Materials

(Jordan onstage)

pitch pipes

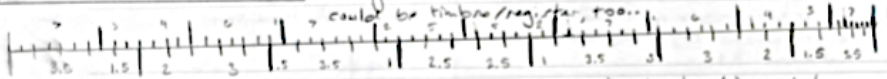
12.29.18 - beginning with "she is ill" rhythm (↑), fairly pronounced/periodic already rhythm (?)  
- Hilde is in a different world, rhythmically, tonally, pitch-wise. A bi-tonal, bi-metric musical world. Caretakers music returns, added to mixture of Hilde/the EVER, the new, the not-yet. Different worlds gradually coalesce/align RHYTHMICALLY (not in pitch/harmony)

all play 1/2  
pitch pipes  
+ then  
multiple delays  
pitch shifts - a poly-rhythmic background, landing  
SCATTERING CHORDS  
(Gtr + Fl + H + P)

1.26.19 - H has broken ostinato - easy, partial, like scattered light/shadow - it persists independent of the Caretakers' music

7	10mm	10	10	...
5	7mm	7	7	
4				

intuitions of harmony/ensemble, not sure what happens here?  
- music is linear, I think it needs simple harmonies/contrast + occasional changes - bitonality  
- also good to contrast with scene 2 somehow - that



How the meters subdivide each other - each creates (based on its downbeats) a palindrome of subdivisions - I can use that.

5/4 divides 7/8 in this pattern: || 7 | 3+4 | 6+1 | 7 | 2+5 | 5+2 | 7 | 1+6 | 4+3 ||  
7/8 divides 5/4 in this pattern: || 3.5+1.5 | 2+3 | 5+3.5+1 | 2.5+2.5 | 1+3.5+5 | 3+2 | 1.5+3.5 ||

The question is how to use this. If I just make everything an accent, won't the sense of independent meters get diminished? Maybe a smaller musical figure with these proportions?

- I think just having each meter do its thing will be best, but I can make the pitch/harmony stuff palindromic (generally) + each 10/7mm section will be arch-like

- maybe just start with scales? 5 implies pentatonic but I don't want that - maybe H is doing quintuplets in 7/8 (!) that just implies 7/8 or 5/4 w/ diff tempo, which could work

Hilde can go through the color sonorities P+I  
H vac + Fl  
Elast  
one cycle/10mm  
I don't know how many cycles yet. It can be interrupted probably anyway...

USE THE RHYTHM SUBDIVISION PALINDROME in last cycle to set up I am well arrival  
She is ill  
5/4 basic ost rhythm maybe: || 1 | 1 | 1 | 1 | 1 || 5 notes  
5/4 can be whatever the vocal line needs

2.17.19 - guitar plays strong 7 harmony solo over 10mm - idiomatic, independent, based on the 2 cell harmonies

- Flute "leads" Hilde in 7/8

Relationship:

Hilde  
Flute  
Gtr

10mm

break repeat, varied - musical + free

Fl (leading Hilde)  
Fl + Hilde

Scene	Dramatic Character	Musical Qualities	Instruments/Sounds
3.2 Light Body (5.00)	Mysticism  [Fragments of earlier scenes in accom?]	Sparse, open, spacious Hushed, (geometric, patterned?)	Voice (soprano) → Alto flute? Flute (acoustic + live electr.) 2 pit. pipes (?) making more + electr. sense more SUB BASS

## PARTICLES - WAVES

## Sketches/Ideas/Materials

12.29.18

She is ill / I am well rhythms accelerate + dissolve into micro sounds, grainlets etc - a layer of swirling light (like huge flocks of birds - maybe this is just a spatial thing - barely there AMSR tickling swirling mass). Sparse, lots of silence. A capella Hilde singing. Solo flute playing virtuosic figures - textures of the ever (a bit), the new, the not-yet (?). Sub bass later in the scene? Flute Body music (3 melodies/tonalities at once? or particles/wave - probably that). Flute plays short notes - particles; long notes/phrases waves? What is Hilde using/singing? The Not-Yet (H) - She has some electronics/texture on her singing. Musical materials unknown for this scene (?) Flute maybe using 4ths/5ths "waves" - scene ends with building low/sub gradually becoming basis for scene 4

1.26.19 Flute is generally textural (?). Play with light effects (p.3, p.51)

- refraction (sudden timbre +/or intonation change)
- reflection (electronics - sample/reverse or SPAT/delay...)
- etc - MULTIPHONICS? ("Play the best mph for your instrument?")

ALTO? - I think so

1.12.19 Draft Eval

- 078 ostinato?  
[new wave, ok? related to earlier str. etc?]
- Flute playing textural, interesting sounds + GEOMETRY (electronics)
- spatialization
- particle/wave
- maybe maj scale ub6?
- H singing lyrical (?):  
lyrical technical



Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
4 light sub (3:30)	Respite, a break/intro Magical/Wondrous Timeless THE EVER	Articulate - detailed - luminous silence-adjacent - quiet-fast, light-like Static - lightspeed	- brake drum/wood block/crotales (?) - concert flute (downward) - clean electric guitar skins, op. gen-3 - pitch pipe ensemble voices (?)
<p>Symmetry/augmented triads GEOMETRY</p> <p>Sketches/Ideas/Materials</p> <p>(begin with sharp single pulses that spawn detailed harmony &amp; rhythms - infinity in microcosm, develop into quiet, detailed, articulate groove (light echo of the Great Curve) entire band but ppp, fast &amp; delicate, like a strawed beast or machine of light.)</p> <p><u>LIGHT OCTAVE</u> - no, don't think this works</p> <p>Development of 1.4 RADIANT HARMONY(?)</p> <p>12-20-12</p> <p>Begin with sustaining sub-bass. Flute, guitar, pipe (brake drum) all playing short, quiet sounds - parts of a large perfect pattern, gradually increasing frequency &amp; revealing the overall pattern, patiently developing it until it's a light, quiet, articulate groove but then that also reflects in waves of radiant harmony. Fast but also static. Builds &amp; then it's as if the audience slowly drifts away from the music - it continues or is implied as continuing, but audience experiences a fade to silence (or quiet drone of same kind).</p> <p>→ pitch pipe (f) → electr. spectrum analysis, spawning circuits, geometries etc</p> <p>flute brake drum guitar harmonic</p> <p><u>THE EVER</u></p> <p>1-6-17 - Thinking about just intonation - a different world/sound - we are in the MACRO/quantum - simple integers/numbers, geometry, spatialization. A core motive, revealed somehow (?)</p> <p>1-26-17 - mostly electronic (?) with box notation (?) or "hovering" (counted in on click track) events for players</p> <p>Fibonacci of Fibonacci - perfections - nested proportions ← SuperCollider? Fixed (make in SC)</p> <p>maybe one Fib. signature controls all events: delays, decays, panning(?), attacks (forward/backward)</p> <p>- with long sine waves</p> <p>- intonation (?) Fibonacci intonation? (try it)</p> <p>use together, i.e. delay + decaying</p> <p>f(1) f(1) f(2) f(3) f(5) f(8) etc</p> <p>* maybe "HUE" sonistics in just or Fib intonation interesting, fading in &amp; out</p> <p>things coming + going (light is space)</p>			

Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
5.1 The Choice (6:00)	Intense, gripping, Suspenseful, catastrophic, powerful threatening The old vs the not-yet	Building to Dissonant, complex, loud, poly thematic } chaotic tonal rhythmic Dynamic - from quiet to loud	soprano (+ freeze) + other "ascend" electric guitar - distorted, intense flute (pic./contrast) - Hilde's theme, in low, powerful drums a whirlpool snare

## HILDE in HUMAN ERROR

## Sketches/Ideas/Materials

### SCENE

Four Days/Already rhythms/sounds begin as Hilde sleeps - a caretaker comes in (who?) - Jordan, carrying something (?) Hilde is singing not-yet/new sounds but they are disconnected. She sings a bit of Already music too - she is tempted. Ensemble mostly in Already world - constricting, restricting, downpressing, low drums (if possible) + sub-bass, distorted guitar. This has to mix/contrast the Already, the not yet, the ever, + has to lead to the new - maybe reprise building noise, but maybe not instead of white noise it's "black noise" - low, darker, heavier, distorted, and pitched down. (Jordan is on stage here I think) flute "hits" = low PERC (elect) (SCOR) PRESSING DOWN/WEIGHT

BLACK NOISE

Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
5r2 Morning (4:00)	Justice, Resolution, Expansion, Triumph, Transcendent, FREE The NEW	Quietly powerful → song like (gradia-like) Musical with hints of alternate particles / waves - clear music with key, time-bent alternate lines (March-like?) RECAP-LIKE?	acoustic gtr → texture elect alto flute vibes, brake drums, snare

### HILDE in THE NEW

#### Sketches / Ideas / Materials

Fibonacci pulses?  
TIME POINTS

Radiant harmonies, bell-like, the sense of a superpattern but it's too big to grasp by ear - organized sounds on a large scale. Hilde is no longer quite human. Her vocal lines are broken - it's an effort for her to "down-sample" / translate what she feels. Angular but consonant somehow. She is free. The music/sound is the sound of light / the basic organization of the universe (poetically expressed). Organized around ELEGANT LAWS. Things move but it's not clear how they are coordinated, but they are. This section is a particle dance, the MACRO pulse, inexorable + effortless

The  
Vast Dance

Scene	Dramatic Character	Musical Qualities	Instruments / Sounds
5.3 Closing (2:00)	After the end, Framing	coda = reprise conclusive / "evolutional" approaching silence Low	Everyone, new quiet distorted electric guitar piccolo + elect. triangle → distorted Caretakers' Chorus = vocalese (?) Soprano = prerecorded + live harmony

### HILDE = THE NEW

### Sketches/Ideas/Materials

After the end - Hilde off stage harmonizing with her pre-recorded vocal.  
 Dust settling - electronics - microsounds - WE ARE INSIDE THE MACRO -  
 mostly space - occasional DOPPLERS - samples of instruments from earlier,  
 playing back as fragments (?) (if all Caretakers are on stage, or if Caretaker + mom + dad?)  
 All sounds collect - whatever pitch/timbre they are - into a rhythm, a pulse  
 that organizes itself - then fades, leaving Hilde to sing the last line  
 a capella.



## B.4 – Forte Set Harmonic Analysis of Musical Elements

"Cage" motive harmonies

(D Aug) v.e.s → closing, replace A→ w/ 5ths

checking /realising "color chords"  
harmonics on p.78 are correct (p.77 are not)

1-25-19 sp - revised/summary of harmony elements so far

Parsicelli:  
↳ Framing harmony  
↳ wide-spaced C, D, G maj LH  
↳ hope motive [4 3-note sonorities]

MZ harmony incl. resolution pitches + "release" harmony

Rox hexachord harmonies

CAGE motives (closing + opening) harmonies (composite) - also A pentatonic

Color chords (3-note sonorities + inversions)

Wozzeck BLUT (6+3+4+6) 6-24 [= violet + per] bkt.  
↳ difficult to hear as one from this 6 note segment

Z-cells Black Keys over c.D-E Pers. LH

triads etc.

cage bg b7 (?) → stack as 5ths  
  
usable  
LH [7-3-4] → middle(3-4)  
[5-4] (see 7d-blk) up (0255B)

OR!  
w/ Bb LH

pitches incorrect - CHANGED Rec 239T X-o  
3rd segm  
w/in ... triad  
from something above  
middle pitches...  
use End and voice low

Harmony	Subset	Prime Form	Forte Name	Actual PCs	Notes
Parsicelli:	no	(012578)	G-18		Framing, foundational sonorous (hope motive)
Pers. LH	yes	(037)	B-11		wide-spaced may triad; can transmute in interesting ways, still FRAMING
Pers. RH	yes	(027)	A-9		stacked 5ths (on E)
Zepherus	no	(012367)	D-5		contains Z-cell + maj 3rd (G-A) [Eb Ab A Dj #3/4g
Trop LH (2)	yes	(014)	E-3		hexo-chord w/out the main mzh-harmy = NOT a subset of P!
Zap BH (1)	yes	(016)	E-5		tritone + PS almost Z-cell [-5b-Gb-[E]-A#] 24/10 (?)=13 SUSSEFOP
Hope 1	yes	(027)	E-9		Stacked 5ths (on B)
Hope 2	yes	(037)	F-11		Oj mag triad, widely spaced (6th + 5th) sup 3rd in bass
Hope 3	yes	(015)	F-4		f-th + G-th, but also F5+m6 (see Zap RH)
Hope 4	yes	(027)	F-9		Stacked 5ths (or Ep)
Rox Hx 1	no	(012578)	G-18		corrected contains Db maj
Rox LH Hx	yes	(040)	G-5		also tritone + PS, almost z-cell [-c-p-f-a-e-i-g-z/a/g-tt] 124/t-mz
Rox RH Hx	yes	(027)	G-9		Stacked 5ths (on F#)
Rox Hx 2	no	(012478)	G-217 (G=4)		structurally, 2 semitones difference from Hx 1, contains Eb maj
Rox LH Hx	yes	(037)	G-11		like Hope 2, Ebmaj triad, widely spaced w/ 3rd in bass
Rox RH Hx	yes	(027)	G-9		stacked 5ths (on A)
Cage 1 (G-M)	no	(048)	G-12		D= see color chords
Cage 2 (M)	no	(0156)	H-8		contains (015) + 15G minor (015)
Cage 3 (M)	no	(0355)	H-16		contains 3st Cage, i.e. a Cage/G chord
Cage 4 (M)	no	(0167)	H-25		odd, univocal-like don't get it (I guess wrong)
Cage 5 (M)	no	(024)	I-6		wt segment also center of A Pent., start of C maj scale
Wozzeck 38	no	(012468)	I-24		- corrected 1,24,t/f
Wozzeck 39	yes	(036)	J-10		corrected Octave Cage I
Wozzeck 52	yes	(017)	K-11		corrected B major?



**HARMONY**

Sketches/Ideas/Materials - Overall plan, progressions

Color spectrum → octave

Not sure this is workable  
does it even make sense  
and mapping?  
- maybe make each color  
1/7th of the realistically  
available spectrum  
(from 110-15k Hz)  
A2 → A7  
3.456  
1 2 3 4 5 octave 2  
+ 5 60 pitches / 7 k  
E2 → D#8  
70 pitches =  
10 notes/color?  
Am I doing this right?  
More importantly, will  
this yield anything  
musical?

Rec 2357 12-26-93  
✓ close from Rec 2356  
Violet → Red  
Harmonies

"COLOR SPECTRUM"

1 4 5 6 7 10 11 12 3 5 7 9 11  
Forte 200121 [3, 4, 8, 9] (0156) 4-8

Total Interval Content (First)

Interval Vectors	Normal Order	Prime Form	Forte Name
Violet: 1 4 7	002001	[1, 4, 7]	(036)
Indigo: 0 2 5 6 10	121321	[1, 2, 13, 14, 17, 18]	(01468)
Blue: 1 3 5 8 9 11	122212	[3, 5, 8, 9, 11]	(02368)
Green: 1 4 5 6 7 10	313431	[4, 5, 6, 9, 10, 11]	(012569)
Yellow: 1 2 3 5 7 8 11	225222	[2, 3, 5, 7, 8, 11]	(013569)
Orange: 0 1 3 4 6 9	225222	[0, 1, 3, 4, 6, 9]	(013469)
Red: 1 3 7 11	020301	[11, 1, 3, 7]	(0248)

x-z = 322242 x=3-9 y=4-8 z=3-11  
[1, 0, 1, 4, 6, 7]  
(012578)  
[6-18]

## B.5 – Wozzeck and Erwartung Signals Analyses

[illegible]



## B.6.1 – Leitmotif/Signals Analysis

MM.	Text	Musical Quality/Character	Signals/Transitions Notes/Themes	HELP/HOPE/HIDE MOTIVES *12	Leitmotif(s)	# in section
51-56	in the middle of a...	electronic?	electronic? / mystery / NOT YET [NOT YET motive?]			
51f	there were no people		sightlessness		lightless	1
52-55	before "third no. 1000s"		already there? [Radiant humanity]			
160	Start scene 2	fatalistic, fateful	seychord		Four Days	1
177	four days of loss...	grieving	loss (general)			
172	... But also, hide		expansion / the NEW (Hesperities?)		Glimmer (35-38)	
178	... Four days of being gone		maybe "days" or "one" understanding-related		(Abandonment?)	1
194	... But I am not ill	grieving	courage, power, self belief		Healing Not Till	
202	... Four days		loss		Four Days	2
217	... Day One	portent	narration (is this a signal?) version of "day" (Day 1)		Four Days (?)	3
223	... I Freeze		look at 11, NOT YET / mystery			
229	Freeze...		NOT YET / mystery			
238	I Freeze		NOT YET / mystery			
238	Every human body gone		there were no people (?) yes			
251	I could not see them		sightlessness (no people)		lightless	2
255	I felt ill...		what? temporary? missing in list above? (1, 2)		Help motive	2
262	Parents the truth...		Telling / Parents / TRUTH / Hide		Hide / Help	13
268	They did not believe me		Wozzeck / BLUT motive - misunderstood		Abandonment	2
272	I could not see them...		sightlessness (no people?)		lightless	3
275	... mother said		abandonment / misunderstood / pathological		Abandonment?	
280	... father was silent		abandonment / disorientation		Help?	
285	... Aunt Claire		family, already (reasons)		Abandonment?	
305	Hide is lost...		abandonment, disbelief, already			
313	I hear their voices...		sightlessness			
321	Sleepless night...		parent on / four days? / seychord		Four Days	
328	... Then, remember	structural, feature, motif	Four Days			
349	... I felt light-headed		Not Yet (electronic?)			
358	... I could hear		sightlessness / not yet			
363	When I looked again...	distress/alarm	(no people?)		lightless	
365	Gone!	distress/alarm			lightless	
368	Gone.	resignation			lightless	
369	... I told my mother	trying	family abandonment		Help Motive / BLUT?	
375	didn't speak at all...	let down / disaster	not being believed		Help motive	
379	could not see her...	sad			lightless	
385	... but there was also	uplifting, happy/joy	reverse pentatonic "something" thing?		Glimmer	
394	comfort in the gloom...	peaceful, safe	the NEW (Hide + Glimmer?)			
396	... The third day	structural, repeat	seychord		Four Days	
412	... then	building, tense, before	the NOT YET + lightless (?)			
413	... then	building	the NOT YET + more lightless			
414	then...	tension	the NOT YET + more lightless			
416	hopeless things...	tension	mystery / NOT YET			
419	changed somehow...	tension	mystery / NOT YET / lightless			
423	happening again...	suspension, tension				
430	sun had been	shock, fear/alarm	panic (?)			
431	Nothing... nothing	panic/alarm	panic			
437	loneliness but dim...		there's a motive here [investigate]		Dim (?)	
444	into myself...	resignation	hopelessness, despair		smallness	
451	didn't even tell my uncle...		family, abandonment			
452	... Then, later	tension, ominous	what's there is pentatonic, too bright (?)			
463	... until	panic				
467	clearly...	panic/alarm				
470	light!	alarm/panic	light/loss / Panic			
474	Oh!...		satellite / panic / lack of faith			
474	"... (after) (end)"	portent?	before therealization dim the new(?)		Dim (?)	
479	moonless sky...	reaction				

Dimness (?) rel. to Glimmer  
Panic (percussion pattern?) just perversion?  
Not Yet + "leitmotif" a texture/treatment? live elect on the vocals? microsounds? particles/moves  
76 "nothing nothing" in 430, 432 - lightless motive? (similar to Wozzeck BLUT?)  
EVER = estimate? → sinners  
Turning

lin	Text	Musical Quality / Character	Notes / Themes	Leit-motif (?)	if in seq
487	Oh...	restart, future	Four Days / Zap chord	Four Days	
506	Grows trees...	leitmotif	row tetrachords / what's there		
515	When...	before, signalling	not yet / lightless 515-524		
524	Grows trees		same as 506		
526	Disappeared...	reaction	gone / lightless / panic [528] [530] [533]	Lightless	
563	Feels full...	opening, hope	Not limmer, hope, hide [565] [570]		
574	Oh...	power, strength	courage, power (like 194) but less - post	Healing	
618	... Ad Ioh I	swell, determination	huge, insight, excitement, thrill, joy [my joy!] <sup>new</sup>	Joy? Ioh I	
624	... embraced	peacefully, safe	Hilde's humor (the new)		
628	... Ad Ioh I	swell, aware	like 618	Joy? Ioh I	
639	... Perhaps I am still	calming, power	like 194, 574, but calmer, developing	Healing not III	
643	... I oh I	swell	mellowing	Joy / Ioh I	
651	For that thing...	MOTIVE	Hilde's in (+ Joy / Ioh I?)	Hilde	
706	Ah...	MOTIVE	I am well	Wellness (?) in well	
838	... I feel something	depicting action	Flute enters	Lightbody / insight	
843	communication...	"	Flute / lightbody action	Lightbody / insight	
865	inspiration...	"	lightbody about to speak	insight / choice	
867	... must make choice	realization	insight, reaction, CHOICE (?)	insight / choice	
873	... Oh!	realization	insight, reaction	insight / choice	
878	vision...	depicting action	depicting like 858, 843, 865	Lightbody	
882	flow...	significance, body	loss of INSIGHT / Hilde hope in negative (?) <sup>renewal</sup> ground	Truthless	
885	see again...	lift	ordinary hope	eyesight	
887	seeing again...	fall	truthless		
890	pain...	dread, doom	the cost (?)		
897	regain my vision...	reaction	ordinary hope (truthless)	Eyesight (truthless)	
899	... I am always	pre-realization, lead	ordinary hope / ordinary life		
908	... I am always	pre-realization, lead	flute enters his thoughts		
910	but wait...	pre-realization	the cost		
914	regain...	lift			
919	mundane...	fall			
919	... and what then	trivial	agitation, anger, bitterness <sup>ALREADY (sp. by H)</sup>	Doubt	
931	kind of choice...	reaction	the cost, choice		
934	... classes	MOTIVE	ordinary girl (already a motive there in 935)		
937	or what...	reaction, build	like 919		
948	will it be...		the choice (check what's there in 919)		
948	... forever	deflation	abandonment, help (?) Hilde, hope ④ mix	Help / Blot	
956	... for my family	sorrow, sorrow	Help / abandonment	Help	
963	my mind...	reaction	BLITZ question		
963	... and I do	realization	ordinary hope [what's there now is the EVER <sup>new</sup> sight]	Eyesight (truthless)	
972	hand...	resignation / temptation	temptation		
977	Ah... Ah	sorrow, dread	the cost	The cost	
984	Final change...	fall	cost	Lightless / cost	
990	more black...	fall	cost	Lightless / cost	
991	for good...	fall	cost	" "	
996	head...	Big realization, in	The cost, Panic	cost / Panic	
997	... go there it is	stage action	lightbody leaving, H sleeps	The choice (cost)	
1005	Have to choose...	closing, reborn	The CHOICE	EVER	
100ff	Scene H		The EVER motives, textures in fl. & r.	Four days (?)	
1101	Top of scene S	structure, setting	panic, fright		
1164	who's there...	alarm, shatter			
1167	few minutes...	signal	the threat / truthless, family, abandon	Threat	
1171	choose...	motive	the choice	The choice	
1181	Come	tension, alarm	harmony in str & the threat *	The threat	
1185	... Bright	opening, reflecting	Hues, glimmering, hope		
1220	forget you...	transition	eyesight	Eyesight / choice	
1224	... ordinary life	inter transition			
1230	... how can I	pre-real	Already - spiky row	Already / "realism"	
1238	... no, common sense	resignation	like 972 (temptation) cost, eyesight, choice		

My Joy  
Ioh I  
Healing  
Wellness  
Lightbody (str harmonics?) + INSIGHT  
repeatedly?

CHOICE?  
Truthless?  
Eyesight?

The cost / the choice  
Already  
Z-cells  
The Threat  
(loud Z cell?)  
Here



mm	Text	musical qualities/char.	Notes/Themes	Leitmotif(s)	# in Seq.
1244	be undone...	resignation	like 1238 temp. cast against choice		
1245	... but wait	faith, insight	hope, glimmer, hues		
1252	inside...	lifting into hope	glimmering, faith, power, healing (hammer/d)		
1255	scary...	confidence	marsh-like? strong, span 1255+1263 (punctuation)	Confidence? Light	
1263	... Even	lift, swell	tutti build / arrival to aria = Truth/Hilde/hope	(Joy?)	
1267	... My Joy	Triumph	Hues	(Joy)	
1303	... light	insight/triumph	repeated triumphant - heartbeats	Joy	
1313	light!...	Stage action	Hilde thinking, deciding → 1327	choice (?)	
1330	... Yes	breakthrough	Hilde has decided → 1341		
1342	... wait	alarm/panic	Threat/panic = Truthless (3 cells) Already		
1352	intervene...	rising danger	Threat / already / truthless		
1356	with us now...	rising danger	Threat / already / truthless		
1357	No stop	Alarm	wobble BLT	Hdp	
1370	cho... sent	SILENCE			
1371	... Ah...	beginning, calm, faith	so = The EVER (ost?) chords may be, yes	EVER / TRIUMPH (New)	
1375	and yet...	surprise / joy	joy Healing/faith / lightbody / glimmer	Quantum / the NEW	
1390	I feel...	power, triumph	the NEW = all above?		
1392	precedes me...	awakening	quantum / new [1386]		
1386	this bad... here	Stage action	crotales w/ gestures		
1391	... I know	texture	the new/quantum Hilde hope + harmonies		
1398	beats...	deepening power	low pulse		
1401	... I know the way	Stage action	turning to light door, SEEING (true sight)	True sight	
1403	way out...	Stage action	light door		
1418	Ah	liberation	with/ETHS = ASCENDED	Ascended	
1420	Hilde...	Stage action	ascended footsteps = HILDE walks out	soft magic pace	
1423	Hilde...	almost silence	Hilde vast exit	trough pitch tone?	

Basic list of Leitmotifs/Elements: (rewrite w/ name, then contents (i.e., Four Days, Zap))

<ul style="list-style-type: none"> <li>✓ The Not Yet (texture) (140)</li> <li>✓ Hilde</li> <li>✓ Hope</li> <li>✓ Help (4ths) (family) (lightness)</li> <li>✓ Four Days (Zap chord)</li> <li>✓ Pöschelt: (Radant) EVER?</li> <li>✓ The Already (octatonic, Zezills) (smallness)</li> <li>✓ Dilaton (whole tone) (Silly Band)</li> <li>✓ Hues</li> <li>✓ Row (multiple forms)</li> <li>✓ Smallness</li> <li>✓ Cage (not sure I like this one)</li> <li>✓ Not Yet (motive) (narrators in 1.1)</li> <li>✓ The Ever (wandering ost) (sinusoidal intonation) (Radant)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Lightless (no people)</li> <li>✓ Abandonment (Wozzeck)</li> <li>✓ Bleating (not III)</li> <li>✓ Lightless (no people...)</li> <li>✓ Glimmer</li> <li>✓ The NEW (Hilde glimmer)</li> <li>✓ Panic (para.)</li> <li>✓ Dimness/dimlight</li> <li>✓ Grass, trees (row tetra.)</li> <li>✓ Joy</li> <li>✓ I on I</li> <li>✓ Sweetness on well (bi)</li> <li>✓ Lightbody/insight</li> <li>✓ Choice</li> <li>✓ Nothing (?) (m430)</li> </ul>	<ul style="list-style-type: none"> <li>Truthless</li> <li>Eyesight</li> <li>The Cast</li> <li>Ordinary girl (w. 935)</li> <li>Temptation</li> <li>The Threat (yelping 118)</li> <li>Confidence</li> <li>Triumph (the new, ever?)</li> <li>Quantum / the NEW - (composite?)</li> <li>True Sight</li> <li>Ascended motive (15)</li> <li>Ascended Theme (8)</li> </ul>
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\* Casetakers 1.1 times → the not yet?  
 15 - ascended music  
 Pos. harms  
 Zap chord  
 Levels  
 1 = supercategory  
 2 = composite of 1st 4s  
 3 = theme-like/group  
 4 = motive, atom  
 Ascended = 7ths / 5ths  
 is too much, too late for new?  
 Decision (power, hope)  
 TRUE SIGHT  
 Triumph - composite of EVER, Hope, Hilde  
 but also complex - no easy beauty  
 (keep harmonies)  
 Quantum / the NEW

## B.6.2 – In Light Leitmotif Development and Categorization

Name	Type <sup>Recurrent Texture</sup>	Musical Elements/Content	Level*	Family	#	Notes
Like Froze	motive	narrators' pitches 1.1	1	NOT YET		
Timeless thing	texture	live afloat, particles/waves, grains, delays, some shifts	2 (?)	NOT YET		
The Already	CATEGORY		1			
The NOT YET	CATEGORY		1			
Diatonic/Bells	pitch sets/harmonies	octatonic, 2 cells	3	ALREADY		
Smallness	motive	Bb Ab E G	1	ALREADY		
Row	CONNECTOR	6-2-1-8-5-0-e-7-4-3	1	(various)		
Doubt	texture	spiky row	3	ALREADY		
Hilde	motive		4	HILDE		
Hope	motive/set	4 triads	3	HILDE		
Help	theme	stacked 4ths	3	HILDE (Family)		
Four Days	motive	zap chord	3-4	HILDE (?)		
Radiant	motive/harmony	Perschetti	4	EVER		
Dilation	pitch set	whole tone	3	(new, not yet)		
Hues	pitch set/harmonies	pentachords/triad/dyads	2	(new, not yet, new)		
Cage	pitch set/harmonies		3	ALREADY		
The EVER	CATEGORY		1			
Wandering estimate	theme-like		3	EVER		
Sinuous (iteration)	texture/timbre		2	EVER		
Lightloss	motive/harm	"There were no people..."	4	NOT YET		
Abandonment	motive	Wozack BUT	4	HILDE (ALREADY)		
HILDE	CATEGORY		1			
Not Ill	motive	I am not ill	4	HILDE		
Glimmer	motive/set	Pentatonic "something"	3, 4	NOT YET		
The NEW	CATEGORY		1			
confert in the gloom	motive		2	NEW, HILDE		
Panic	gesture	percussion, startling	1			
Graylight (dimness)	theme-like gesture	"luminous but dim..."	3	NEW/NOT YET		
Grass, Trees	motive	row triads	3	LIGHTLOSS		
Joy	theme-like	"my joy" melody	3	HILDE		
I On I	motive		1	HILDE/NEW		
I am well	motive		1	HILDE/NEW		
Lightbody/insight	depicting action	Perschetti ① + glimmers		EVER		eval Pers. (?)
The Choice		? I On I + Smallness	3	HILDE		
Nothing	gesture/motive	m. 430	2	LIGHTLOSS		
LIGHTLOSSES	CATEGORY		1			
Truthless		? diss. low register (Pers.)	3	ALREADY		
Eyesight		? Ordinary Hopes		Already/Truthless		
The Cost	gesture	Threat + Love/Return	3	HILDE		
Ordinary Girl	motive			HILDE/ALREADY		
Temptation				ALREADY		
The Threat	theme-like motive	chordal gesture	3	ALREADY		
Confidence				HILDE		
Triumph (my joy?)		Joy?		HILDE/NEW/EVER		
Quantum/the new	texture/motives	Hilde/ Hope / harmonies	2	NEW/EVER		
Truesight	gesture			NEW		
Ascended (motive)	motive	5ths ↑ 4ths ↓	4	NEW		
Ascended (THEME)	theme	if theme 1.1 + S.3	3	NEW		

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